BEIRUT ARAB UNIVERSITY

ASPECTS
OF LANGUAGE - STUDY

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1973

PRINTED IN LEBANON BY BOUHEIRY BROTHERS - BEIRUT

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PREFACE

This book is intended as a short introduction to 'Linguistic Sciences', a term which "covers two closely related but distinct subjects : linguistics and phonetics. They are closely related because they look at the same material, language, with the same aim, that of finding out how it works. They are distinct because they look at different aspects of language and need different methods to describe these aspects." [1]

However, there is much controversy among the various schools of linguistics as to the scope of studies included in the term 'linguistics', the relation of linguistics to phonetics, the procedures and techniques of linguistic analysis, the hierarchical order and number of levels of linguistic statement which the linguist works with. The point of view presented in this book is largely derived from the the British School of Linguistics associated with the late Professor J. R. Firth and his followers. This is not to underestimate the efforts of the other schools and figures prominent in linguistic research.

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1) Halliday, McIntosh and Strevens, *The Linguistic Sciences and Language Teaching*, Longmans, London, 1964, p. 9.

But for such linguists as Bloomfield, Sapir, Fries, Pike and Hockett of the American School, Trubetskoi of the Prague School and Hjelmslev of the Copenhagen School, to mention only a few names, linguistics would not have attained its present status among the other empirical sciences.

Modern Linguistics has been introduced as an academic subject only recently into our Arab Universities. In Egypt, for instance, the teaching of linguistics and phonetics to undergraduates did not start before 1960. At the post-graduate level, linguistics does not form part of the syllabus in any department of English, with the exception of that of the Institute of Languages at Al-Azhar University. The need is then felt to familiarize the teachers, the students and the interested general readers of English with the fundamentals of this relatively new discipline which at present constitutes an integral part of courses designed for students of English whether working for a first degree, a diploma or a post-graduate degree in most universities all over the world.

Part I deals with selected aspects of language which may represent an introductory survey of general linguistics ranging from the scientific definition of language to the study of certain topics of that branch of linguistics generally known as 'Institutional Linguistics' or 'Socio-Linguistics'. This branch deals with, among other things, "the study of language communities, singly,

and in contact, of varieties of language and of attitudes to language." [1]

In Part II emphasis is laid on the practical aspect of the study of phonetics, rather than on the general study of the subject. The study of the theory of speech sounds is made with reference to English phonetics, both for purposes of practical language teaching and for helping learners to overcome the difficulties they meet in the pronunciation of English. The approach adopted in this part is based on similar lines to those of Daniel Jones's book An Outline of English Phonetics. *For intonation the tonetic stress-mark system devised by Roger Kingdon in* The Groundwork of English Intonation *is used.*

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1) Ibid., p. 75.



SYMBOLS

[ ] encloses a phonetic transcription.
: indicates that the preceding sound is long.

1. Phonetic Symbols for English Forms

VOWELS[1]

[i :]	as in fee
[i]	» » fit
[e]	» » get
[æ]	» » sat
[ɑ :]	» » far
[ɔ]	» » hot
[ɔ :]	» » saw
[u]	» » foot
[u :]	» » food
[ʌ]	» » cut
[ə :]	» » girl
[ə]	» » above

DIPHTHONGS

[e i]	as in say
[ou]	» » know
[a i]	» » buy

1) English vowels, diphthongs and consonants are described in detail in Part II below.

[au]	as in town
[ɔi]	» » toy
[iə]	» » queer
[εə]	» » fair
[ɔə]	» » more
[uə]	» » sure

CONSONANTS

[p]	as in path
[t]	» » tea
[k]	» » care
[b	» » bus
[d]	» » dawn
[g]	» » game
[m]	» » men
[n]	» » no
[ŋ]	» » long
[l]	» » lane, till
[f]	» » far
[v]	» » van
[θ]	» » thing
[ð]	» » there
[s]	» » sink
[z]	» » zone
[ʃ]	» » share
[ʒ]	» » treasure
[r]	» » race
[h]	» » hair

[tʃ]	» » chair
[dʒ]	» » judge
[w]	» » wave
[j]	» » yard

2. *Phonetic Symbols for Egyptian Arabic Forms*

VOWELS

[i]	half-close to close front spread vowel, close when long or final, as in [ṭin] (a ton), [ṭi:n] (mud)
[u]	half-close back to central rounded vowel, close rounded when long or final, as in [xud] (take), [zu:r] (visit)
[e]	mid to half-close front spread vowel, short and long, as in [betna] (our house), [be:t] (house)
[o]	mid to half-close back rounded vowel, short and long, as in [xoxna] (our peaches), [xo:x] (peaches)
[a]	front open vowel, short and long, as in [baʕat] (he sent), [ba:ʕ] (he sold)
[ɑ]	back open vowel, short and long, as in [baṣṣ] (he looked at), [bɑ:ṭ] (arm-pit)

CONSONANTS

[b]	voiced bilabial plosive, as in [ba:b] (door)
[d]	voiced denti-alveolar plosive, non-emphatic, as in [da:s] (he trod)

[f]	voiceless labio-dental fricative, as in [fa:s] (spade)
[g]	voiced velar plosive, as in [ge:ʃ] (army)
[h]	glottal fricative, as in [ha:yil] (great, excellent)
[ḥ]	voiceless pharyngeal fricative, as in [ḥilm] (dream)
[k]	voiceless velar plosive, as in [k*a*r*a*m] (generosity)
[l]	voiced denti-alveolar lateral, as in [la:m] (he blamed)
[m]	voiced bilabial nasal, as in [ma:t] (he died)
[n]	voiced denti-alveolar nasal, as in [na:m] (he slept)
[q]	voiceless uvular plosive, as in [q*a*ry*a*] (village)
[r]	voiced alveolar flap, as in [r*a*:s] (head)
[rr]	voiced alveolar trill, as in [f*a*rr] (he fled, he escaped)
[s]	voiceless denti-alveolar sulcal fricative, non-emphatic, as in [simm] (poison)
[ʃ]	voiceless palato-alveolar fricative, as in [ʃ*a*ɛr] (hair)
[t]	voiceless denti-alveolar plosive, non-emphatic, as in [ta:h] (he lost his way)
[w]	labio-velar semi-vowel, as in [walad] (boy)
[x]	voiceless uvular fricative, as in [x*a*r*a*g] (he went out)

[y]	voiced palatal semi-vowel, as in [yiʃrab] (he drinks)
[z]	voiced denti-alveolar sulcal fricative, non-emphatic, as in [za:r] (he visited)
[ʔ]	glottal plosive, as in [ʔa:m] (he stood up)
[ʕ]	voiced pharyngeal fricative, as in [ʕa:m] (he swam)
[ɣ]	voiced uvular fricative, as in [ɣabi] (stupid, fool)

Emphatic Consonants

ḍ, ṣ, ṭ, ẓ are 'emphatic' consonants corresponding to 'non-emphatic' d, s, t, z respectively, as in [ḍa:ʕ] (it was lost); [ṣiya:m] (fasting); [ṭamaʕ] (greed, covetousness); [ʕaẓi:m] (great).

3. *Other Symbols*

{ } encloses a morpheme that comprises all its allomorphs

~ indicates variation between allomorphs

ˈ means that the following syllable has primary stress

ˌ means that the following syllable has secondary stress

Other symbols will be referred to when introduced in their appropriate places.

PART I

LINGUISTIC THEORY



1. WHAT IS LANGUAGE ?

There is no doubt that language plays an important role in our life. Everyone of us is concerned with language in one way or another. In Hockett's opinion, language is "the most valuable single possession of the human race." [1] Language consists of a highly complex and arbitrary system of signals. These signals are voluntarily produced for the purpose of communicating ideas, emotions, and desires among the members of a given community. [2] In addition, language is an acquired, not an instinctive, activity. Man, as a social animal, learns language in his childhood by means of the acquisition of a complicated set of habits of speaking and writing. These habits become so natural that we grow almost unaware of the fact that we possess them. We are least conscious of what we are doing when we speak our language. Indeed, the acquisition and mastery of the structure of one's language is one of the wonders of man.

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1) Hockett, C. F., *A Course in Modern Linguistics*, The Macmillan Company, New York, 1958, p. 1.
2) Cf. Sapir, E., *Language*, Harcourt, Brace & World, Inc., New York, 1921, p. 8.

However, some linguists distinguish between 'language' and 'speech'. In De Saussure's view, language (langue) is "both a social product of the faculty of speech and a collection of necessary conventions that have been adopted by a social body to permit individuals to exercise that faculty."[1] On the other hand, speech (parole) "is an individual act. It is wilful and intellectual."[2] Language is then a social not a physical fact, a passive not an active product, and "outside the individual who can never create nor modify it by himself."[3] Language can also be separately studied by virtue of the fact that we can study dead languages which "are no longer spoken". Besides, language is more amenable to scientific study than speech, since language is "homogeneous". It is an organized structure in "a heterogeneous mass of speech facts."[4] According to De Saussure, only language is worthy of analysis and study, but it is through the investigation of the speech phenomena that this study is made possible. As Martinet puts it :

> "speech merely gives concrete expression to the organization of language. It is only by the examination of speech and the behaviour it determines among

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1) De Saussure, F., *Course in General Linguistics*, translated by Baskin, W., Peter Owen, London, second impression, 1964, p. 9.
2) Ibid., p. 14.
3) Ibid., p. 14.
4) Ibid., p. 14.

hearers that we can attain to a knowledge of language." [1]

This brings us to the defining characteristics of language.

Since language is primarily studied through its spoken aspect, then language consists mainly of sounds. Although this seems an obvious statement about language, yet it implies that the spoken signals are given priority over the written symbols in the systematic study of language :

> "While the writing systems of languages have their systematic aspects, the linguist considers writing and other methods of representing language secondary to the basic phenomenon of speech." [2]

Secondly, language is systematic in the sense that each language has a limited number of units which are arranged according to certain patterning. Sequences of sounds, words and phrases are subject to definite and definable patterns of distribution. In English, for example, sound units do not occur in haphazard arrangements. There are limitations on the occurrence of certain sounds and sound sequences in given positions, e.g. the sounds [ŋ] and [ʒ], and the sound sequences [ŋg], [ndʒ], [dl], [pw], [sb] and [sr]

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1) Martinet, André, *Elements of General Linguistics*, translated by Palmer, E., Faber and Faber Ltd., London, 1964, p. 34.

2) Dinneen, F. P., *An Introduction to General Linguistics*, Holt, Rinehart and Winston, Inc., New York, 1967, p. 7.

never occur initially in English. [ŋg] occurs only in medial position in, e. g.

[lɔŋgə], ['mæŋgou], ['bʌŋgəlou];

[ndʒ] occurs in medial and final positions, e. g.

[tʃeindʒiŋ], [reindʒiŋ], ['tʃælindʒ], ['mænidʒ].

On the contrary, we may find numerous examples of words beginning with [st] or with [sp] in, e. g.

[stil], [stri:t], ['stʌmək];
[spɛə], [spin], [spel],

and only a very few words with initial [sf] or [sv] as in, e. g.

[sfiə], [sfiŋks] and [svelt][1]

Restrictions are also observable in the distribution of word classes and syntactic structures in languages. In English, the word 'man' (noun) may occur in certain frames like :

'The.... is my uncle.', 'I visited the....', 'He is a clever....', 'I told the.... the whole story.', 'Give the cheque to the....', 'I spoke to the....'

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1) For more details on admissible and inadmissible combinations of consonants, see Wijk, A., *Rules of Pronunciation for the English Language*, Oxford University Press, London, 1966, Chapter VII.

but it cannot occur in frames like 'He will.... the house.' A verb like 'see' or 'buy' may occur in this position. Again, the distribution of the negative particles in Egyptian Colloquial Arabic differs from that of the negative particle (not) in English. For example, the negative declarative verbal sentences in Cairene Arabic is characterized by the inclusion of the negative particle [miʃ] or [muʃ], or the discontinuous negative particle [ma..ʃ] according to the following pattern :

1. the particle [ma..ʃ] is affixed to a perfect or an imperfect verb without the prefix [bi_] or [ḥa_], e. g.
   [ma raḥʃ_ilmadrasa][1] (He did not go to school. He has not gone to school.)
   [ma yiʕrafʃ*i* ʕarabi][2] (He does not know Arabic.)

2. the particle [miʃ] is affixed to an imperfect verb with the prefix [ḥa_], e. g.
   [mis ḥayza:kir_innihardɑ]
   (He is not going to study today.)

1) The hyphen (—) marks elisions at word-junctions, but it does not necessarily mark the place at which the elided portion occurs in corresponding contexts of non-elision.

2) A sequence of three consonants in close transition does not occur in Egyptian Colloquial Arabic. In order to avoid a combination of more than two consonants a short vowel is introduced between the second and third consonants. This anaptyctic vowel will be transcribed *i*.

3. the particle [miʃ] or [ma..ʃ] is affixed to an imperfect verb with [bi_], e. g.

   [miʃ bitiʔra_kwayyis]
   (She is not reading well.)
   [ma btiʔraːʃ_kwayyis]
   (She is not reading well.)

4. the particle [miʃ] or [ma..ʃ] is affixed to the auxiliary in a verbal phrase consisting of an auxiliary + a verb, e. g.

   [miʃ laːzim tisaɛdu]
   (You don't have to help him.)
   [ma kanʃ*i* biywaggihlak_ikkalaːm]
   (He was not speaking to you.)

In English, on the other hand, the negative declarative sentence is characterized by the inclusion of the particle (not) according to a different pattern, i. e.

1. (not) is inserted immediately after the verb if it is an anomalous finite, e. g.

   She is not my sister.
   They will not go to Cairo next summer.

2. If there is no anomalous finite in the sentence, (not) is inserted after do, does or did (according to person and tense), e. g.

   Miss Galila does not teach English.
   They did not see the film yesterday.

Thirdly, beside sounds and patterned structures, language has meanings. The sequences of sounds and grammatical forms of a given language are meaningful to the speakers of this language, since different societies use different signals to effect communication among their members. These signals or symbols are arbitrary in the sense that there is no logical connection between the symbols and the messages they convey, e. g. English speakers say 'I want some water' whereas Egyptian speakers say [ʕa:yiz mɑyyɑ] and French speakers use the sentence 'Je veux de l'eau' to convey the same message. In these examples the same object (water) is given different names in different languages. This shows that the relationship between the object and the sequence of sounds which stands for this object is merely a matter of convention :

> " It is this implicit convention that constitutes and stabilizes linguistic systems. An important consequence of the conventional nature of language is that we can be confident that an accurate description of the speech of a single representative speaker will be applicable to the speech habits of others in the same community. " [1]

Another distinctive feature of language is that it is not static. It is continually changing. Old English is quite different from modern English. Languages

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1) Dinneen, F. P., *An Introduction to General Linguistics*, Op. Cit., p. 9.

have also the ability to enrich their repertoires by loan words from other languages in the process of their development in order to adapt themselves to the growing needs of human civilization in general and their local communities in particular. This dynamic characteristic of language shows itself not only in time, but also in space. The spread of one dialect as a 'standard language' over a great part of a given speech community is a case in point. The rise of the East Midland dialect towards the end of the 14th century and the recognition this diaelct has won as 'Standard English' all over England since the 15th century is a well-known historical example.[2] Furthermore, owing to this dynamic character of language, one and the same language may have different dialects in different places, e. g. the various dialects of Arabic in the countries of the Middle East. These dialects exhibit divergencies at all levels : phonological, grammatical and lexical.

Finally, since languages differ among themselves, and every language has its own arbitrary symbols, sound sequences, syntactic structures which contrast with those of other languages, each language must be considered as unique. It is this unique social activity that marks off human societies from those of animals.

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2) For more details, see Section 8 'Varieties of Language' below.

Having answered the question : 'What is language?' we may now ask : What is Linguistics ? Linguistics is sometimes defined as the scientific study of language, but this may imply that any other study of language outside the sphere of linguistics is unscientific. Many other specialists, beside the linguist, are concerned with the study of language. The psychologist studies language phenomena as elements differentiating human beings from other species. The anthropologist has to deal with language problems in his anthropological researches, since language constitutes an integral component of any culture. The philosopher studies language in terms of its logical and semantic aspects, and so on. For these specialists and others the study of language is as essential as it is for the linguist, but the only difference is that they study it as a means to an end, whereas the linguist studies it as an end in itself. A more appropriate definition of linguistics is that it is the science which studies language in terms of its internal structure or patterning, i. e. in terms of its phonology, grammar, vocabulary and meaning.

The basic type of linguistic study is termed Synchronic or Descriptive Linguistics. This is concerned with the detailed and comprehensive study of the structure of language at any given point in time without reference to its historical development, etymology or comparison with other languages. These fall

inside the province of other types of language study :

1. Diachronic or Historical Linguistics which deals with the changes a given language exhibits in its development through time, or within a given period of time.

2. Comparative Linguistics which is concerned with the study of the relationship between two or more languages which descend from a parent tongue, i. e. which belong to the same language family such as, e. g. French and Italian.

3. Contrastive Linguistics which is the study of points of similarity and difference between two or more languages which are not necessarily related to a common origin, e. g. French and Arabic.

Although Descriptive Linguistics is regarded as the fundamental aspect of languagc study which forms the basis of historical, comparative and contrastive linguistics, yet it is the last type that is of great importance to the teacher of a foreign language. He should be aware of the conflicting points between the students' mother tongue and the foreign language they learn. This awareness will enable him to devise in advance specific drills which will help the students overcome the difficulties they come across in the learning process.

2. SPEECH AND WRITING

Now that we have defined language and linguistics we have to consider in some detail the distinction between two different modes of linguistic communication : speech and writing. The former uses human noises or speech sounds transmitted through the air, whereas the latter uses marks on a surface. Man, as a human being and as a member in a given community, has acquired a set of speaking habits long before he was familiar with the comparatively recent activity of writing. Writing has not evolved as a basic representation of speech, as some linguists maintain. [1] Writing developed as a means of visual communication independent of speech. By and by the visual method became connected with speech, i. e. the symbols were linked to items in the spoken language. Once this had taken place, the symbols became a script. [2]

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1) Gleasons claims that " A written language is basically a representation of a spoken language. " This is not true from the historical point of view. See Gleason, H. A., *An Introduction to Descriptive Linguistics*, Revised Edition, Holt, Rinehart and Winston, New York, 1955, p. 425.

2) Halliday, McIntosh and Strevens, *The Linguistic Sciences and Language Teaching*, Op. Cit., p. 48.

Whatever the historical facts are, from the objective viewpoint of linguistics, it is more appropriate to study language in a literate society as a two-fold activity : spoken and written. Each activity is to be examined first for itself and then relationships between the two activities may be subsequently investigated and established.

There are radical differences between a spoken language and its written counterpart. These differences may be stated at all levels : phonological, grammatical, lexical and stylistic. The following differences are noteworthy :

1. Speech makes use of phonological devices which usually carry grammatical meaning. Intonation, stress, pitch and rhythm are almost unrepresented in writing except by means of the crude devices of the punctuation system.

2. There is apparent ' ungrammaticalness ' in speech. Many words and phrases which are clear from the linguistic or non-linguistic context are omitted. Other words, on the contrary, may be redundantly repeated. In addition, expletives and fillers (often meaningless words or phrases) occur frequently in speech, e. g. sort of, kind of, you know, I mean, you see, my goodness, damn.. etc. in English ; and

[baʔa] (so, then, why then), [ṭab] (well, then), [ʔumma:l] (then, pray), [bass] (then), [yaʕni] (so then, why then).. etc. in Egyptian Colloquial Arabic. Speech is also full of stammers and errors of articulation, of vocal segregates or human noises which seem "to be identical with actual language sounds" [1] such as uh-uh for negation ; uh-huh for affirmation ; uh for hesitation ; ah and aha for surprise in English ; and [ya:h], [ʔihhi:(h)], [ʔih] for surprise in Egyptian Arabic.

Pauses in speech are never predictable. They may come at any place, whereas in writing they are closely connected with the grammatical structure of the sentence.

3. Some colloquial words the use of which is socially banned in writing, whether on moral or religious grounds, may be commonly used in speech within the same community. Besides, technical terms which are of frequent occurrence in speech in daily situations may be less common in written communication.

4. The main difference between speech and writing is that speech takes place in a certain

1) For 'vocal segregates' and other 'vocalizations', see Trager, G. L., 'Paralanguage : A First Approximation' in Hymes, D., *Language in Culture and Society, a Reader in Linguistics and Anthropology*, Harper and Row, London, 1964, pp. 274-279.

situation. This comprises, beside the speech events, other non-linguistic activities which complement the information without giving further details as is the case in writing. In Halliday's words :

> " ... in written language the language usually accounts for the whole of the relevant *activity* in the situation, and even, in the case of literature, for the whole of the *situation*; whereas with spoken language, the proportion of linguistic activity to the total activity in any situation may vary almost from a hundred per cent to zero. " [1]

> Halliday adds that in a football match, for example, language plays only a small role, whereas in an academic seminar the whole situation will be saturated with language, i.e. language "may play almost the whole part." [2]

On the other hand, although a written language has not all the advantages of its spoken counterpart, yet it has its own distinctive characteristics. First, it makes use of word division which is a sort of morphemic convenience. This word division is not clear in speech. Secondly, a written language distinguishes between homophonous words (i. e. words which sound

1) Halliday, McIntosh and Strevens, *The Lingustic Sciences and Language Teaching*. Op. Cit., pp. 54-55.
2) Ibid., p. 55.

alike) by arbitrary spelling differences, e. g. pairs of words like :

> hole : whole ; rows : rose ; lead : led ; boy : buoy ; sea : see ..etc.

Thirdly, writing is more permanent than speech, since it can be preserved more easily than speech. It acts as an 'external memory' to human beings. This privilege is more apparent in literate societies where utterances can be preserved and widely circulated to others. In addition, writing is less ambiguous than speech in certain operations, e.g. mathematic operations. Hockett calls this "clear indication of *scope*" :

> "If I say *two times five minus three plus seven*, this may work out to 18, 11, — 10, 14, or 0, depending on how the operations are grouped. In writing there are devices for keeping these clear :
>
> $$2 \times (5 - 3 + 7)$$
> $$2 \times (5 - 3) + 7$$
>
> and so on. It is possible to achieve freedom from ambiguity in the spoken form by pauses of various lengths at various places, but it is difficult ; and in more complex operations it soon becomes impossible." [1]

Other less important devices are available in writing but not in speech such as the use of capital and small letters, lightface and boldface, Roman and Italic, and print and cursive.

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1) Hockett, C. F., *A Course in Modern Linguistics*, *Op. Cit., p. 548.*

3. LEVELS OF LINGUISTIC ANALYSIS

Any learner of a foreign language will realize that language is a complicated system. Competent techniques are then required to deal with such system. Further, the complexity of language makes it a difficult task for the linguist to describe language by any one method or all at once. Hence, the linguist concentrates at any one time on certain aspects of his material in order to make scientific statements about language. He investigates these aspects by the application of different kinds of approaches which are called *Levels of Linguistic Analysis*. Although the linguist splits up language into so many levels for purposes of linguistic description, we should take into consideration that language itself is a unity :

> "The nature of language, as it exists, gives rise to the distinction of different levels ; it must, however be emphasized that it is not language itself which is divided like this, but the operations of the linguist and his resultant analytic statement." [1]

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1) Robins, R. H., *General Linguistics, an Introductory Survey*, Longmans, London, third impression, 1966, p. 12.

Linguists disagree among themselves as to the number of levels with which to operate, the criteria to be applied to them, and the order of presentation of these levels. The viewpoint adopted here is that of the British School of Linguistics.

The first fact to recognize in any linguistic study is that an utterance has two aspects : form and meaning. A complete understanding of language and its function in human life requires both an understanding of the formal structure of utterances, i. e. their linguistic form, and of the relation of these utterances with the situations in which they are used within the framework of a given society, i.e. their context or meaning. The need for adequacy of description makes it incumbent upon the linguist to account formally for the grammar of a language, for its phonology, and for its lexis (vocabulary). But speech events do not occur in a vacuum, i.e. in isolation from other events. They occur in relevant situations, and both the situations and verbal behaviour are ongoing. Therefore, in order to give full account of the significance of human utterances, relations between these utterances and constituents of their environment should be described. It is these relations that give 'meaning' to utterances. 'Meaning' here is not a semantic or conceptual study, since this kind of study has not yet been subjected to rigorous and objective criteria, but it is an attempt to understand the all important

experience of the working of language in society. In Firth's words : "The object of linguistic analysis... is to make statements of meaning so that we may see how we use language to live." [1] In fact, the term 'meaning' is used in a wider sense in Firthian linguistics. It comprises "the whole complex of functions which a linguistic form may have." These functions are phonetic, phonological, lexical, syntactical, and contextual. [2]

However, with the advent of modern linguistics the stress was first laid on linguistic 'form' only without resorting to meaning, hence formal or structural linguistics, especially in the United States. The tendency now is to study language in all its aspects, as a live human activity not as a dehydrated substance :

> "The emphasis is now on the description of language activity as part of the whole complex of events which, together with the participants and relevant objects, make up actual situations. In this way we can make

1) Firth, J.R., 'A Synopsis of Linguistic Theory, 1930-55' in Palmer, F. R. (editor), *Selected Papers of J. R. Firth 1952-59*, Longmans, London, 1968, p. 192.

2) Ibid., p. 174. For a detailed discussion of this concept of 'meaning', see Lyons, J., 'Firth's Theory of Meaning' in Bazell, C. E., and others (editors), *In Memory of J.R. Firth*, Longmans, London. 1966, pp. 288-302.

maximum use of what is observable, in the attempt to understand exactly what the language activity is doing." [1]

British linguists have been trying to solve the problems of the study of 'meaning' in linguistic analysis. They are of opinion that to leave the study of such an important aspect of language is to leave much unsaid.

The analyst's task, then, is to split up "the whole complex of functions which a linguistic form may have" into its various components and apply to them the relevant levels of analysis for purposes of formulating linguistic statements. These levels may be represented by the following table :

Linguistics		
Form	Context	Situation
	(relationship	(non-linguistic
Phonology	between form	features: physical,
Grammar	and situation)	physiological, so-
Lexis	(An Interlevel)	cial, political.. etc.)

1) *The Linguistic Sciences and Language Teaching*, Op. Cit., p. 39.

There is much dispute among linguists as to the order or direction in which these levels are dealt with. For example, in 'Linguistic Hierarchy' Palmer maintains that grammatical statement is given priority over phonological one. He considers grammatical statement as "the main function of the linguistic analysis."[1] Like Halliday, Palmer relegates phonology to an interlevel or "an ancillary technique", i.e. "a bridge between the grammatical statement and the direct observations that are reported in phonetics."[2] The direction of analysis, in Palmer's view, is from grammar to phonology. From the present standpoint, there is no hierarchy among the various levels. We can start our analysis by grammatical statement proceeding to phonological and contextual features as components interpreting the grammar. It may also be possible to begin with phonological information and then proceed to context via grammatical and lexical statements. Alternatively, one may begin with context, as a means of delimiting and identifying the linguistic data, then proceed to the appropriate levels of analysis according to the nature of the data and the extent of the analysis required. This relationship of levels may be represented by the following diagram :

1) See Palmer, F. R., 'Linguistic Hierarchy' in *Lingua*, 1958, Vol. 7, p. 240.

2) Ibid., p. 240.

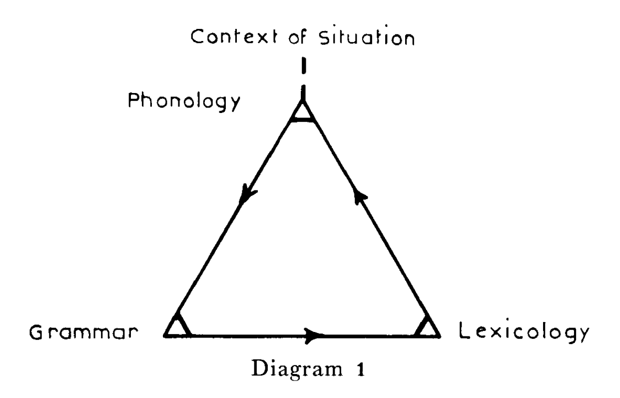
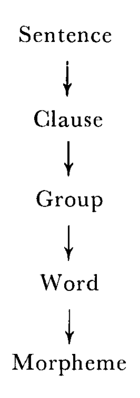


Diagram 1

Phonology is the level which deals with the patterning and organization of a particular language in terms of the phonetic features and phonetic categories specifically set up for this language. But human language is much more than mere sounds. Out of all the sounds (and shapes) available, each language selects only a small number which are used in certain predictable and limited combinations to build up larger units such as words and sentences. The level of grammar is then set up to account for the structure and patterning of these units and how they function in sequences. For this purpose, descriptive units and categories need to be distinguished for each language. These units and categories are established on criteria different from those used in the establishment of phonological units and categories. For example,

in English we have to recognize word-classes such as nouns, verbs, adjectives.. etc., groups such as nominal groups, verbal groups.. etc., clauses such as adjectival clauses, adverbial clauses and noun clauses. Thus, the following descriptive units (arranged in hierarchical order) are set up to describe English grammar :



The arrow indicates that a sentence may consist of one or more clauses, a clause of one or more groups, a group of one or more words, and a word of one or more morphemes. Morpheme is therefore the smallest grammatical unit. Word order is also part of the internal structure of the language, e. g. the type of contrastive word-order pattern which distinguishes in English 'The boy hit the girl' from 'The girl hit the boy.' It has been traditional practice in the study of the grammar of a language to divide it into :

1. Morphology which studies the internal structure of words or classes of words and

2. Syntax which studies the external relationships of these words and word-classes.

However, according to the theoretical framework presented in this book, a separate level is required to account for the way lexical items (single words as well as idiomatic word-sequences) of a given language tend to pattern in different linguistic contexts. It seems useful to study the attributes of lexical items independently of grammatical considerations, although we may admit from the outset that there is close interdependence between grammar and lexis. A lexical item is then defined as that which enters into a certain kind of choice different from a grammatical choice.[1] In English, for example, we may consider individual words like hat, bed, carpet, chair, lamp ; phrasal verbs like 'take after', 'take to', 'make for'; and idioms like 'a bad egg', 'flog a dead horse' as lexical items. But words like 'the', 'if', 'when', 'that', although grammatically 'words', they do not operate in the language as lexical items among which there is a large choice, but as terms in a grammatical system. Technically speaking, lexis deals with *open set* choices, i. e. choices between a great number of possibilities,

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1) *The Linguistic Sciences and Language Teaching, Op. Cit.*, p. 33.

whereas grammar deals with *closed system* choices, i. e. choices between a very limited number of possibilities. For example, in the sentence

He sat comfortably on the...

the space may be filled with one of a group of items comprising, among others, chair, sofa, settee, bench, stool, divan.. etc. Observations about how such items pattern and arrange themselves in groups or *sets*, about the words with which they habitually keep company *(collocations)* are the concern of *lexicology*, not of grammar. Grammar, on the other hand, may account for the choice between the terms of grammatical systems such as 'these/those', 'who/whom/whose/which', 'the/a' or 'active/passive', 'singular/plural', 'past/present/future' and so on.

Before we discuss each level of analysis in some detail, a word about the interlevel of context is relevant.

4. CONTEXT OF SITUATION

The term 'context of situation' was first coined by Bronislaw Malinowski. In the course of conducting his anthropological researches in the South Seas among the Trobriand Islanders he discovered that words, phrases and sentences are meaningless if they are divorced from their context of action and situation. In the tilling of soil, the choice of certain areas for cultivation, the fixing of boundaries, or other agricultural activities, he found that language formed a part of these organized processes, in the sense that words were as important as actions and bodily movements for the carrying out of the activities in hand. Language here does not function as merely a means for the expression of thought or the conveying of ideas but as an essential part of the activity. [1] As long as language is defined as the expression of thought or the communicatiou of ideas, emotions and desires, we shall never, in Malinowski's view, be led to the study of context or to the study of associated actions and participants. Such treatment of language by eminent

1) See Malinowski, B., *Coral Gardens and Their Magic*, George Allen & Unwin Ltd., London, 1966, Vol. 2, pp. 6-8.

thinkers like Henry Sweet, Sapir, Bloomfield and Jesperson has neglected the effective consideration of the context of situation in which the utterance is embedded.

Malinowski's concept of the context of situation is summed up by his statement in 'The Problem of Meaning in Primitive Languages' : "...utterance and situation are bound up inextricably with each other and the context of situation is indispensable for the understanding of words." [1] This indicates that the study of any text should take into account its relation with the situation or situations in which it is used. Context here is used in its broadest sense. It comprises not only the linguistic environment of the utterance, i. e. words and phrases preceding or following the text, but also the extra-textual features such as physiological, social, economic and political phenomena, together with the activities of the participants involved. It includes also what is termed in linguistics 'paralanguage' [2] such as vocalizations, facial expressions and bodily gestures. All these components should be related to the relevant culture in which the

1) Malinowski, B., 'The Problem of Meaning in Primitive Languages', Supplement 1 in Ogden and Richards, *The Meaning of Meaning*, Kegan Paul, Trench, Trubner & Co. Ltd., London, 1923, p. 467.

2) For this term, see Trager, G. L., 'Paralanguage : A First Approximation', Op. Cit., pp. 274-279.

utterance is used. Culture, according to Malinowski, embraces "inherited artifacts, goods, technical processes, ideas, habits and values" [1] as well as social organization.

We may argue that Malinowski goes too far in applying this concept to language in general. Its pragmatic character makes it inadequate as a linguistic theory. He confuses between what is actual or concrete and what can be used as a theoretical framework to which actual and concrete facts are referable as merely typical examples. To Malinowski, the context of situation seems "to mean little more than an ordered series of events, considered as in *rebus*." [2] Robins calls this 'particularism', since "every utterance must be treated separately and general statements of meaning are precluded." [3] Malinowski was in fact influenced by the pragmatic philosophy and behaviouristic attitudes which were prevalent in the 1930s in the United States.

However, Malinowski's effect on British Linguistics in the twenties and the thirties was immense. Firth has been greatly influenced by Malinowski's theory of

1) Malinowski, B., 'Culture' in Seligman, E. R. A. (ed.), *Encyclopaedia of the Social Sciences,* Vol. 4, Macmillan & Co. Ltd., London, 1931, p. 621.
2) See J. Berry's Introduction to *Coral Gardens and their Magic,* Vol. 2, Op. Cit., p. xi.
3) *General Linguistics, an Introductory Survey,* Op. Cit., p. 42.

speech functions in contexts of situation as a workable approach to the problem of meaning in linguistic analysis.

Firth's 'context of situation' is "a schematic construct for application especially to typical 'repetitive events' in the social process. It is also an insurance that a text is attested as common usage in which the occasional, individual and idiosyncratic features are not in the focus of attention." [1] It is of an abstract nature. It involves the setting up of a group of interrelated categories, for both verbal and non-verbal events, with a view to explaining the role language plays in a given environment :

> "By setting up contexts of situation, the observer or analyst undertakes to state the relationships of utterances to the situations or environments in which they are said or could be said. In a context of situation the utterance or the successive sentences in it are brought into multiple relations with the relevant components of the environment." [2]

These relations may be set up between the following categories suggested by Firth :

1. The participants : persons, personalities and relevant features of these.

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1) Firth, J. R., 'A Synopsis of Linguistic Theory, 1930-55', Op. Cit., p. 176.

2) *General Linguistics, an Introductory Survey*, Op. Cit., p. 177.

a) The verbal action of the participants.

b) The non-verbal action of the participants.

2. The relevant objects and non-verbal and non-personal events.
3. The effect of the verbal action. [1]

The setting up of some or all of these categories depends on the nature of the text and the degree of their relevance to the explanation required. Let us give an example :

An element [wi di ti:gi] or [wi da-yṣaḥ] (Is this befitting ? Is that appropriate ? Is that proper ?) operates in the Egyptian society in the language function of 'mild reproach' among equals, especially relatives and friends. The following categories may be set up to explain a typical context of situation :

1. X is Y's relative or intimate friend. X is a tradesman who lives in, say Upper Egypt, whereas Y lives in Cairo. X comes to Cairo for an overnight to buy some merchandise.

   a) X pays a visit to Y. In the course of conversation X says to Y :

   [ḥaba:t-ille:la: di fi-lkanḍa] (I am going to put up to-night at a hotel.)

   b) Y considers this an inappropriate action on the part of X.

1) 'A Synopsis of Linguistic Theory', Op. Cit., p. 177.

2. Persons who live far from Cairo usually stay at their relatives'/intimate friends' houses during their visits to the capital.

3. Y reproaches X by saying :
[wi di ti:gi] (Is that appropriate/befitting ?) which may be extended by an element like :
[la:zim tiba:t ʕandina-lle:la: di]
(You must spend the night with us.) [1]

This approach is based on the fact that language is a social phenomenon comprising sets of speech events going on in 'the run of experience' [2] — using Firth's expression. The meaning of human utterances will be made clearer if we study their function (i. e. use) in the relevant environment. This study is not the result of a direct description of the actual phenomena : physical, social, religious, political and so on, of the environment, but rather a systematization of these features within such a framework as that suggested by Firth.

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1) For other typical examples, see my article 'Language and the Theory of Context' in *Essays on Language and Literature*, Beirut Arab University Publications, Beirut, 1972, pp. 64-68.

2) 'A Synopsis of Linguistic Theory', Op. Cit., p. 175.

5. PHONOLOGY

i. STRUCTURES AND SYSTEMS

Phonology has sometimes been called 'functional phonetics' since it is concerned with the functioning of speech sounds in a given language or languages. Phonology, like grammar, is organized for each language into a certain number of various units. Languages differ from each other in the number of units and the contrasts which these units carry. The phonological units of a particular language are related to each other by structures and systems, i. e. for each phonological unit we can distinguish structures and systems in the same sense as in grammar. Structures are made up of elements. For example, in phonology CVCVC (where C = consonant and V = vowel) is a structure consisting of C and V elements ; whereas in grammar Noun — Verb — Noun is a structure made up of Noun and Verb elements. System accounts for a limited set of possibilities from which we can make a choice at a certain place in the structure. This number of possibilities are the terms of the system. For example, the system of English intonation consists of

five contrastive tones (the terms of the system) as follows :

Tone I or the rising tone which is the interrogative tone used on certain questions (i. e. Yes/No questions).

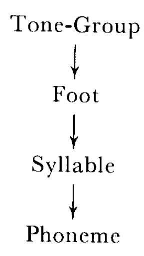
Tone II or the falling tone which is the decided and final tone used on definite statements and on certain questions (Wh-questions).

Tone III or the falling-rising tone which is called the suggestive and apologetic tone.

Tone IV or the rising-falling tone which is called the mocking or impatient tone.

Tone V or the rising-falling-rising tone used for expressing enthusiasm and insinuation.[1]

Halliday postulates four phonological units for English. These are (in descending order) :



1) See Kingdon, R., *The Teaching of English Intonation*, reprinted from *English Language Teaching*, 1948, Vol. 2, Nos. 4, 5, 6 & Vol. 3, No. 1. The British Council, London.

Every tone-group consists of one or more than one foot, each foot of one or more than one syllable, and each syllable of one or more than one phoneme. Thus, the word ‖ then ‖ (where ‖ indicates tone-group boundary) pronounced on, e. g., a falling tone, is a tone-group consisting of one foot consisting of one syllable consisting of three phonemes. The sentence

‖ Why did he | come | yesterday ‖ (where | indicates foot boundary) is a tone-group consisting of three feet. The first foot ‖ Why did he | consists of three syllables, the second | come | consists of only one, whereas the third | yesterday ‖ consists of three syllables. The number of phonemes varies from one syllable to another.

The tone-group is the carrier of contrasts of intonation. The elements of tone-group structure are T (tonic) which is always present and P (pretonic) which may or may not be present, [1] e. g.

1. Tonic only :

    ‖ ˋ then ‖

    ‖ ˋ Sami arrived | this morning ‖

2. Pretonic + Tonic :

    ‖ Sami arrived | ˋ yesterday ‖

    P T

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1) See Catford, J. C., *A Linguistic Theory of Translation*. Oxford University Press, London, 1965, p. 14.

Each tone-group is made up of a foot or more than one foot which carries one of a system of five contrastive tones, i. e.

1. ‖ then ‖ ⁄ rising
2. ‖ then ‖ ∖ falling
3. ‖ then ‖ ∨ falling-rising
4. ‖ then ‖ ∧ rising-falling
5. ‖ then ‖ ∿ rising-falling-rising

These tones have also sub-divisions which carry various meanings. [1]

The foot is the unit of rhythm. English, as well as other languages, makes use of stress to provide a rhythmic unit larger than the syllable. This unit is called the foot. In English phonology each foot consists of one strong syllable, either by itself or followed by one or more weak syllables. The strong syllables tend to occur at roughly regular intervals of time, whatever the number of weak syllables occurring in between, i. e. each foot within the same tone-group tends to have approximately the same duration. [2] Thus, in the tone-group

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1) For further details on English Intonation, see Part II below.

2) This type of rhythm is called 'stress-timing' as distinguished from 'syllable-timing' of Arabic or French. See Halliday, *The Linguistic Sciences and Language Teaching*, Op. Cit., pp. 71-72. See also Catford, *A Linguistic Theory of Translation*, Op. Cit., pp. 15-16. For the relation between this rhythmic regularity and the length of vowels and diphthongs in English, see Part II below.

‖ Why did he | come | yesterday ‖

the first foot takes the same duration of time as the second foot although the first is made up of three syllables and the second of only one syllable.

The elements of the structure of syllables are vowels and consonants. The structure of syllables differs from one language to another. In Cairene Arabic, for example, five possible consonant-vowel structures for the syllable may be recognized : (the relevant syllable is in italics)

CV	in	[*si*xin]	(it became hot)
		[*fi*him]	(he understood)
CVV	in	[*ba:*rid]	(cold)
CVC	in	[*durguh*]	(his drawer)
CVVC	in	[*na:m*]	(he slept)
CVCC	in	[ʕ*add*]	(he counted)

In English, on the other hand, a variety of different syllable structures may be recognized, e. g.

VC	in	[*in*said]
CVC	in	[*rein*]
CCVC	in	[*brein*]
CCVCC	in	[*treind*]
CCCVCC	in	[*streind*]

ii. THE PHONEME

The phoneme is the smallest basic and distinctive unit of spoken language. The term 'phoneme' is an abstraction used for the purpose of describing conveniently the phonological relations which obtain among the elements of a language. The phonemes of a given language are established by comparing between numerous sets of forms that are similar in all but a single phonetic feature. If such a difference distinguishes the two forms in meaning, then the phonetic feature is regarded as phonemic. Pairs of these sets are called 'minimal pairs'. For example, fat and hat, fat and fit, fat and fan are all pairs of words which are different in meaning ; therefore the sounds [f] and [h], [æ] and [i], [t] and [n] are 'distinctive' sounds in English. They are phonemes functioning in the phonemic pattern of English.

Phonemes are classes of sounds. For example, the 'p' phoneme in English comprises the 'p' sound in 'pill, upper, tap, spell' ; the 'k' phoneme comprises the 'k' sound in 'kill, skill, act, maker ..etc.' The sounds that may be included within one and the same phoneme in a particular language or dialect are the *allophones* of this phoneme. For the establishment of the allophones of any one given phoneme two criteria should be fulfilled :

1. The allophones must be similar from the phonetic point of view, e. g. the varieties of the 'k' phoneme in the above example are voiceless velar plosive.

2. The allophones should be in complementary distribution or free variation with each other. "Sounds are said to be in complementary distribution when each occurs in a fixed set of contexts in which none of the others occur."[1] We mean by contexts here phonologic (not morphologic) contexts. For example, in English aspirated [p] and unaspirated [p] are in complementary distribution. The former occurs before a strongly stressed vowel, e.g. part [pɑ:t], pardon ['pɑ:dn], payment ['peimənt]; whereas the latter occurs before an unstressed vowel or after [s], e. g. upper ['ʌpə], spin [spin], sport [spɔ:t]. Therefore, aspirated [p] and unaspirated [p] constitute two members of a single phoneme in English. The same is true with unaspirated [k] and aspirated [k]. The first occurs in consonant clusters following [s] as in sky [skai] and ski [ski:], in medial and final clusters before another plosive consonant as in pact [pækt], and preceding a weakly stressed vowel as in maker

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1) Gleason, H. A., *An Introduction to Descriptive Linguistics*, Op. Cit., p. 263.

['meikə] ; whereas aspirated [k] occurs in most other environments, e. g. before a strongly stressed vowel as in cut [kʌt], card [kɑ:d].. etc., but never in any of those listed for aspirated [k].

We may notice that most of the definitions of the phoneme which have been proposed by various linguists fall into two general categories :

1. Definition in terms of a psychological or mental reality. This view is held by the school of Baudouin de Courtenay and the members of the Cercle Linguistique de Prague. They believe that although the speaker and the hearer identify a sound as the same vocal feature in a given language, yet this sound is objectively two different sounds. The speaker and the hearer are not conscious of this difference but "the speaker intends to produce the same sound, and the hearer has the impression of hearing the same sound." [2]

2. Definition in terms of a physical reality. This view is held by Bloomfield as well as Daniel Jones. According to Bloomfield, the phoneme is

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2) See Twaddell, W. F., 'On Defining the Phoneme', in Joos, M. (ed.), *Readings in Linguistics I*. The University of Chicago Press, Chicago, fourth edition, 1966, p. 56.

a feature of the actual speech-sounds, and Daniel Jones maintains that the phoneme is a group of speech-sounds. [1]

In Twaddell's opinion the phoneme is neither a mental nor a physical reality, but it is an abstraction used as "a terminological convenience to describe the recurrence of similar phonological differentiations among the elements of a language." [2]

However, the understanding of the phoneme principle is an indispensable qualification for a language student. The phoneme theory has also an important bearing on practical language teaching. A person who is obliged to learn only the necessary elements of a language can concentrate on the principal members of each phoneme. Further, grouping of sounds into phonemes enables us to devise the simplest systems of phonetic transcription for every language with a view to practical purposes such as the teaching of correct pronunciation. A system of transcription is unambiguous if one symbol or sign is provided for each

1) Ibid., p. 60. D. Jones gives the following definition of a phoneme: "A *Phoneme* may be described roughly as a family of sounds consisting of an important sound of the language (generally the most frequently used member of that family) together with other related sounds which 'take its place' in particular sound-sequences or under particular conditions of length or stress or intonation." See *An Outline of English Phonetics*, Heffer & Sons Ltd., Cambridge, ninth edition, 1964, p. 49.

2) Twaddell, 'On Defining the Phoneme, Op. Cit., p. 74.

phoneme of the language. It is not essential to provide signs for the allophones or the subsidiary members of the phonemes, since their values are determined by their phonological surroundings. The use of the correct allophones is perhaps more important socially than it is linguistically, but "the use of correct allophones is obviously important to anyone learning a foreign language with intent to speak it." [1]

1) Gleason, Op. Cit., p. 265.

6. FORMAL GRAMMAR

i. TRADITIONAL GRAMMAR

Traditional grammar used to take the criterion of meaning in the written language as the basis of differentiation between one part of speech and another. It usually formulates for us what we may call ' conceptual rules ', i. e. what it thinks should be not what really is . More often than not , it invents situations that are non-existent in the living language in order to deduce certain grammatical rules. It is prescriptive rather than descriptive. In De Saussure's words : " It lacked a scientific approach and was detached from language itself. Its only aim was to give rules for distinguishing between correct and incorrect forms ; it was a normative discipline, far removed from actual observation, and its scope was limited. "[1]

A typical grammar book based on traditional lines is that of Robert Lowth, Bishop of London : *A Short Introduction to English Grammar* (published in 1762). He was of opinion that " the English used by even

1) De Saussure, F., *Course in General Linguistics*. Op. Cit., p. 1.

the best speakers and writers was full of grammatical errors."[1] He thought that he would remedy the situation by investigating "the supposed principles of the language so that one might judge every utterance as correct or incorrect and bring one's own speech and writing into accord with true propriety."[2] Lowth was also responsible for re-introducing into the description of English "a good deal of the machinery of Latin grammar which some earlier writers on the vernacular had sensibly discarded."[3] This was another drawback of traditional grammar. Instead of establishing the description of the grammar of a particular language on the actual speech and writing of the acknowledged speakers and writers of this language, the tendency was to describe it in terms found suitable or assumed to be suitable for another language, usually carrying a higher cultural prestige. The writing of English grammar in terms of Latin usage is a case in point.

In addition, old-fashioned grammars still continue to neglect phonology which is an essential component in the study of language. As we have stated in the preceding section, phonological features like intonation and stress carry grammatical meaning. For example,

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1) Sledd, J., *A Short Introduction to English Grammar*, Scott, Foresman & Company, Chicago, 1959, p. 2.

2) Ibid., p. 2. 3) Ibid., p. 3.

the following words may be either nouns or verbs in accordance with the placement of stress:

> conflict; contest; content; desert; insult; object; present; permit; record; torment... etc.

Consider also the following two examples which show the difference between declarative sentences and interrogative sentences in Egyptian Colloquial Arabic in terms of the tonal patterns associated with these two types of sentences:

[ˀilˀ*a*mi:ʂ niḍi:f] (The shirt is Clean. — Affirmative Declarative sentence associated with a falling tone.)

[ˀilˀ*a*mi:ʂ niḍi:f] (Is the shirt clean ? — Affirmative Interrogative sentence associated with a rising tone.)

The familiar definitions of traditional grammar which are still taught to our students lack in scientific accuracy. For example, the basis on which the parts of speech were classified was inconsistent. Definitions like those of verbs and nouns were based on meaning whereas definitions like those of pronouns and conjunctions were based on use. Thus verbs are defined as 'words that express action, being or condition'; nouns as 'names of things, persons or places'; whereas pronouns are defined as 'words that take place of

nouns'; and conjunctions as 'words that connect words, phrases or clauses'. Further, when we examine the validity of such definitions by applying them to examples from actual speech, we find that they do not stand on firm ground. For instance, in the following two sentences which are similar in meaning:

1. His folly and drunkenness *ruined* him.

2. His folly and drunkenness were *ruinous* to him.

if we accept 'ruined' as a verb because it expresses condition, what shall we consider 'ruinous'? It expresses condition, but it certainly is not a verb, it is an adjective. Again, if we accept the word 'green' as a noun, since it is the name of a colour in a sentence like :

There is too much green in the painting.

what shall we consider 'green' in the following sentence :

I put the green pencil in the drawer. ?

The word 'green' here is definitely an adjective, not a noun.

When we come to the pronoun we find that the definition is also indefensible. In the following sentences it is difficult to find nouns that substitute for the pronouns in italics :

1. *I* hope *you* are satisfied with the result .

2. *It* is easy to learn knitting.

Turning to the definition of the conjunction as a word that 'connects words, phrases or clauses' we find that it also fails. In the sentences

1. My colleague went *to* Aleppo.
2. The man *who* went to Aleppo was my colleague.

we cannot call *to* a conjunction although it connects 'went' and 'Aleppo'; neither can we call *who* a conjunction although it connects two clauses. *To* is a preposition and *who* is a relative pronoun.

Such definitions are not rigorous and precise statements of grammatical facts. They are vague and lacking in consistence. The reason behind the failure of these definitions is the neglect of form for meaning, "although it is precisely through the *form* of our words and sentences that we communicate our meanings." [1]

ii. FORMAL GRAMMAR

In the light of modern descriptive linguistics traditional grammar has to be completely revised and reconstructed. The development of linguistics as an empirical science in the last seventy five years or so has made it necessary that the grammatical patterns

1) Sledd, *A Short Introduction to English Grammar*, Op. Cit., p. 62.

of each language must be described as they are, not as if they were Latin or Greek. Grammarians should work inductively, distinguish speech from writing, avoid oversweeping generalizations and prescriptive judgements. Their judgements should be built on observable phenomena, not on logical, conceptual or semantic criteria. The formulation of laws for the use of language requires first accurate and thorough knowledge of how people actually speak and write, and secondly a justified reason for pronouncements as to how people should speak and write.

Since language is an organized structure comprising an elaborate set of patterns, then we need to apply scientific approaches in the investigation and systematic description of these patterns. Traditional grammarians did not do such thing. Instead they dealt with those parts of the language which were a matter of dispute among the native speakers themselves. This compelled them to make a choice among conflicting conventions. "The bad results of this method," states Sledd, "were exemplified by the fact that... students memorized rules about *shall* and *will* and *between you and I* but learned little or nothing about the sound patterns of their own speech, the way their words were formed, or the selection and ordering of their words in phrases and sentences."[1] Grammatical state-

1) Ibid., p. 7.

ments based on concrete and observable linguistic forms are apt to be more accurate than definitions based on meaning which are useless in practice, as we have seen above.

Formal grammar does not pass value judgements, since its function is to formulate in statements the exact automatic and unconscious habits of the native speakers of the language through a close examination and verification of a vast number of utterances collected for this purpose. It does not prescribe laws but it remains neutral. For example, in the study of dialectal or stylistic variations in English, we find that two variant forms are used: 'Who is Norma speaking to?' and 'To whom is Norma speaking?'. Formal grammar does not evaluate either pattern, but states that the first form is common in colloquial usage whereas the second is common in literary and formal usages. "Its task is to give a clear and significant description of usages which actually occur...and significant statement as to how they differ." [1]

Formal grammar may be defined as the study of the broad relationships among the various morphemes and morpheme combinations in a given language in certain social contexts. These morphemes and combinations of morphemes are arranged in a specific order

1) Gleason, *An Introduction to Descriptive Linguistics*, Op. Cit., p. 177.

in the language, and there is an admissible degree of freedom in the arrangement. Formal grammar describes the principles underlying the arrangement as well as the degree of freedom allowed. This brings us to the discussion of the concept of the morpheme.

iii. THE MORPHEME

The morpheme is the smallest individually meaningful unit in the structure of a language. Thus cat, book, answer, dance, - y, - ly, - ing are morphemes. Since the morpheme is in fact short sequences of phonemes, the morpheme must be grammatically relevant.

Morphemes may be classified into two types:

1. Free morphemes: these can occur alone. They are also free forms or words, e.g. cat, book, answer, and dance.
2. Bound morphemes: these cannot occur by themselves, e.g. - y, - ly, and - ing.

However, a morpheme is not the same as a syllable. For example, the word 'severe' is one morpheme but is composed of two syllables. On the contrary, the verb 'does' consists of two morphemes [du:] and [z], although they form a single syllable. This does not deny the fact that numerous English words consist of only one single syllable, e.g. train, straight, strained.. etc. " Morphemes may consist of one or several whole

syllables, parts of syllables, or, in fact, any combination of phonemes without regard to their status as syllables." [1]

Likewise, the morpheme is different from the phoneme in that a morpheme may comprise one single phoneme, e.g. [z] in 'does' above, but this morpheme is quite distinct from the phoneme [z] in, e.g. zone [zoun], lose [lu:z], vase [vɑ:z].. etc. since it does not share the meaning of this morpheme. Although both the phoneme and the morpheme have differential functions, yet the morpheme is distinguished from the phoneme in that it has also a referential function, i.e. "it may 'refer' to an object or situation or some sort of relation between the two." [2]

Sometimes, morphemes may show partial phonetic resemblance as in, for example, bird [bə:d] and burr [bə:] ; at other times they may exhibit complete phonetic similarity as do, e.g. scene, seen; plain, plane ; fair, fare ; pear, pair, pare. This resemblance is purely phonetic. These words are completely different in meaning. Such morphemes are called *homophones*. Homophones may also consist of bound morphemes, e.g. [z] is a morpheme both in does [dʌz] and in doers ['duəz], but the two morphemes are not identical :

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1) Gleason, *An Introduction to Descriptive Linguistics,* Op. Cit., p. 53.

2) Dinneen, *An Introduction to General Linguistics,* Op. Cit., p. 50.

the first is the third person singular morpheme and the second is the plural morpheme.

Every morpheme in the language has characteristic positions in which it appears, e.g. the word 'girl' may occur in frames like 'I met the...', 'The... is my friend.', 'I came across the...', but it cannot occur in a frame like 'I shall... home.'. A morpheme like 'go' may fill the last slot. The total number of the positions which a morpheme can occupy in contradistinction with all those which it cannot is called the *distribution* of this morpheme. According to this criterion of distribution, the morphemes of a language can be grouped into certain classes. Each class will be distinguished by a characteristic distribution. For example, go, play, walk, call, write... etc. form a main and a large class of morphemes in English. Again, the -s (the third person singular marker), the - ed (the ending of the past tense in regular verbs), the -ing (the ending of the present participle) are classified under a smaller class. The members of the latter class may occur immediately following one of the members of the former class, but the reverse does not occur.

Morphemes may be broadly divided into *roots* and *affixes*. The morphemes go, play, walk.. etc. are one class of roots; book, boy, way, house, road.. etc. are another. A great number of English morphemes are roots. Such morphemes as - s, - ed , re - , - ing, - y, and - ly are affixes. Roots are usually longer than affixes

and form the vast majority of the vocabulary. Two different types of affixes may be distinguished. These affixes occur in English as well as in other languages:

1. Prefixes which precede the root with which they combine, e.g. [ri:-] in reassemble [ri:ə'sembl], [im-] in imperfect [im'pə:fikt], [dis-] in dishonest [dis'ɔnist], and [il-] in illegal [i'li:gəl].
2. Suffixes which follow the root with which they combine, e.g. [-iz] in houses ['hauziz], [-iŋ] in going [gouiŋ], [-iʃ] in childish ['tʃaildiʃ], [-lis] in helpless ['helplis], useless ['ju:slis], valueless ['væljulis] .. etc.

It may be noted that affixes may be added directly to roots as in the examples above, or they may be added to structures formed from a root followed by one or more than one morpheme. Any morpheme or combination of morphemes to which an affix is added is called a *stem*. For example, the English word relations [ri'leiʃənz] is formed from a stem [ri'leiʃən] which is simultaneously a root, and an affix [- z], but the word relationships [ri'leiʃənʃips] comprises a stem [ri'leiʃənʃip] and an affix [- s]. The stem in this example is not a root, for it contains two morphemes. Some stems consist of two or more roots, e.g. postcard, hairpin, sunshine ..etc. These are called compound words. The word 'hairpins' consists of two roots [hɛə] and [pin] and an affix [- z].

In many linguistic environments variant morpheme shapes are used under certain describable conditions of distribution and meaning, i.e.

1. they share some similarity of meaning
2. they are in complementary distribution or free variation, in the sense that each occurs in certain environments in which none of the others occur.

These variant shapes are called *allomorphs.* For example, the [- z], [- s] and [- iz] are allomorphs of the plural morpheme usually represented by the symbol {- Z_1}. These three allomorphs are in complementary distribution as follows:

1. [-z] occurs after a voiced sound except [z], [ʒ] and [dʒ], e.g. dogs [dɔgz], birds [bə:dz], days [deiz].
2. [-s] occurs after a voiceless consonant except [s], [ʃ] and [tʃ], e.g. books [buks], cats [kæts].
3. [-iz] occurs when added to a word ending in one of the sounds [s], [ʃ], [tʃ], [z], [ʒ], [dʒ], e.g. horses ['hɔ:siz], ashes ['æʃiz], churches ['tʃə:tʃiz], noses ['nouziz], garages ['gæra:ʒiz], judges ['dʒʌdʒiz].

The conditioning factor in this case is the phonetic nature of the preceding phonemes. Therefore, the three

allomorphs are said to be *phonologically conditioned*. In order to indicate that the three allomorphs alternate with each other as the variants of one morpheme they are represented by the following symbols:

{- Z_1} = [- z ~ - s ~ - iz] (where the sign ~ means 'varies with' or 'alternates with'.)

Sometimes, the determinant factor for the choice of the allomorph is not a phonologic feature but a specific morpheme or morphemes, e.g. the plural allomorph [- ən] which is added to the singular morpheme ox |ɔks|. In this case the selection of [- ən] is said to be *morphologically conditioned*.

iv. MORPHOPHONEMICS

The ways in which the morphemes of a given language are variously represented by phonemic shapes represent the morphophonemic system of this language. There are various types of morphophonemic changes. The commonest types are :

1. Assimilation : This is defined as the process by which a phoneme is replaced by another phoneme under the influence of a third neighbouring phoneme. Two types of assimilation may be distinguished :

   i. Progressive assimilation in which the conditioning sound precedes the influenced or

assimilated sound, e.g. the - d or - ed of the past tense and past participle of regular verbs in English are pronounced [-t], [-d] or [-id] according to the preceding sound as follows :

a. [-t] is used when preceded by a voiceless consonant sound other than [-t], e.g. asked [ɑ:skt], wished [wiʃt].

b. [-d] is used when preceded by a vowel sound or a voiced consonant other than [-d], e.g. answered ['ɑ:nsəd], warned [wɔ:nd].

c. [-id] is used when preceded by [-t] or [-d], e.g. expected [iks'pektid], demanded [di'mɑ:ndid].

ii. Regressive assimilation in which the conditioning sound follows the assimilated sound, e.g. the words 'news' and 'paper' are individually pronounced [njuuz] and ['peipə] respectively, but in the compound word 'newspaper' ['nju:speipə] the [z] is assimilated into [s] under the influence of the following [p]. Likewise 'five' [faiv] and 'pence' [pens], but 'fivepence' ['faifpəns] where the [v] is replaced by [f] under the influence of the following [p]. [1]

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1) For more examples from connected speech in English, see Part II below.

Again, in the definite article [ʔil-] (the) used in Egyptian Colloquial Arabic, the [l] assimilates to a following consonant having a dental, alveolar or velar component, i.e. [t], [d], [ṭ], [ḍ], [s], [z], [ṣ], [ẓ], [r], [n], [ʃ], [k] and [g], e.g.

[ʔil + ta:g] = [ʔitta:g] (the crown)
[ʔil + ṭɑlɑb] = [ʔiṭṭɑlɑb] (the order / the application)
[ʔil + riḥla] = [ʔirriḥla] (the journey)
[ʔil + gana:za] = [ʔiggana:za] (the funeral)

Such assimilations conditioned by an immediately neighbouring sound is sometimes called *contiguous* as contrasted with *noncontiguous* assimilation in which one or more phonemes interferes between the conditioned and conditioning sounds. The most common type of noncontiguous assimilation is *vowel harmony*. This is a common feature in Egyptian Colloquial Arabic especially in verb-forms. The short vowel of the prominent syllable when open (i.e. ending with a vowel) regularly assimilates to the following vowel, e.g.

['nigiḥ] (he succeeded); ['biʕid] (he went far); ['sabaʔ] (he surpassed); ['fataḥ] (he opened); ['ḥumuḍ] (it went bad); [ʔin'fagaru] (they exploded).

2. Dissimilation : This is a morphophonemic change in which the influenced phoneme becomes dif-

ferent from the conditioning sound. In other words, one of two similar (usually non-adjacent) phonemes is replaced by a different phoneme. For example, in the Old English word purpur(e) the second [r] has changed to [l] in modern English, i.e. purple |'pə:pl|. The change of [r| to [l| is dissimilation.

3. Metathesis : This phenomenon involves the interchange of the position of two phonemes within a word. This morphophonemic type is common in the Arabic dialects, e.g. in Egyptian Arabic both | yirtiʕiʃ | and [yitriʕiʃ] (he trembles) occur, where [r] is used before [t] in the first form and after [t| in the second. Other examples are :

   [ʔara:nib] and [ʔana:rib] (rabbits) ;
   [xazarɑ:n] and [xɑrɑza:n] (bamboos).

   The word [ʕɑrbu:n] (a deposit) in Egyptian Arabic is pronounced [rɑʕbu:n] in Lebanese Arabic. The Palestenian Arabic word for 'ashtray' is either [mtakkih] or [mkattih].

4. Loss or addition of phonemes: This type is also common in various languages. In English, for example, words like blackguard ['blægɑ:d], waistcoat ['weiskout], grandmother ['græn,mʌðə], grandpa ['grænpɑ:], castle ['kɑ:sl] are cases in which consonants are dropped. The [-iz] allomorph of {-Z_1} in, e.g. wishes ['wiʃiz], roses ['rouziz) ..etc. may be considered as an instance of the addition of a phoneme.

7. LEXICOLOGY

i. THE FORMAL DESCRIPTION OF LEXIS

Every language or variety of language consists of a vast number of units which were traditionally divided into content words — sometimes called full words — and structural or form words. Full words were defined as independent sense-units, e.g. words like table, lion, bad, ten, horse, take, quickly, yesterday.. etc. Besides these, there are other words which have little or no independent meaning, but which are used to denote relations between the various parts of a sentence, i.e. they have no distinct semantic function, but have instead grammatical functions. These were termed form words, e.g. in, to, the, are.. etc. It has been traditional practice to deal with full words in the dictionary, and to relegate structural words to the grammar-book.

The misleading notion of this division lies in the fact that it is difficult to draw an 'absolute line of demarcation between the two'[1] as Sweet states. A certain word may sometimes be a 'content' word and

1) Sweet, Henry, *The Practical Study of Languages*, Oxford University Press, London, 1964, p. 73.

at other times a 'form' word, e.g. 'have' is a 'content' word in 'They have their lunch early' and a 'form' word in 'They have eaten the whole cake.' In addition, a word often expresses a semantic conception and a grammatical one at the same time. Consider, for example, the idea of 'plurality' lying behind words like lions, tables, men, sheep.. etc., and the idea of 'pastness' in words like got or ate.

Since such description has proved to be inadequate, another classification has been suggested. Two fundamental categories are postulated for the formal description of the lexis of English. These are called *Set* and *Collocation*. They are considered to be of an abstract nature like grammar although the latter relates generally to a higher degree of abstraction. Still, the lexical items of English must be described within a theoretical framework that has its own dimensions of abstraction. This theory should treat that part of linguistic form which grammar cannot deal with. Some linguists like the transformative - generative grammarians in the United States of America held the view that formal linguistics is nothing more than grammar. But we should remind them that lexis is also part of the form of the language.

To explain the concept of a lexical set we start by defining a lexical item. "Contrary to what is often assumed, it is *not* because an item is grammatically

a *word* that it operates in the language as a lexical item. Many lexical items are also words, but some of them are not."[1] For instance, 'took off' in 'She took off her coat' is one lexical item although they are two words. On the other hand, items such as 'that', 'the', 'of' are not lexical items though they are considered words from the grammatical point of view. Thus, we can define a lexical item as that which "enters into a certain kind of choice that is different from a grammatical choice."[2] In technical terms this item operates in the language in an *open set*, i.e. a choice among a large number of possibilities, in contrast with a grammatical word which operates in the language in a *closed system*, i.e. a choice among a limited number of possibilities, say between 'this, that, these, those'; 'I, you, he, she, we, they' and so on. "Since closed systems are characteristic of grammar and open sets of lexis we often speak of a 'grammatical system' and a 'lexical set.'"[3]

A lexical set is defined as a group of lexical items which have similar collocational ranges. Any given lexical item habitually occurs or collocates wtih a range of other lexical items. The item under discussion is termed the *node* or *nodal item*, whereas the

1) Halliday, *The Linguistic Sciences and Language Teaching*, Op. Cit., p. 33.
2) Ibid., p. 33.
3) Ibid., p. 33.

items with which it is usually associated are termed the *collocates*. For example, in English if we take items as finance, economy and industry as nodal items and try to establish their list of collocates, i.e. their collocational ranges, we find that these items share a good number of their collocates. These three items can then be grouped into a lexical set.[1] This brings us to the second category, i.e. collocation.

Collocation accounts for the fact that many items in a given language have high probability of co-occurrence with other items in the same language. This co-occurrence must be in terms of the regular tendency of a particular item to keep the company of other lexical items. These items, in Firth's words, should be 'mutually expectant'[2], i.e. item A expects item B as B expects A, e.g. the item 'cup' expects the item 'tea' as 'tea' expects 'cup' in 'a cup of tea'. Again, the word 'April' tends to collocate with items like 'fool' and 'showers'. In this example 'April' is the node or nodal item; 'fool' and 'showers' are the collocates.

Firth is the first linguist to define collocation in this technical sense in linguistics. He provides us with interesting examples from English. The word 'ass' in

1) See Enkvist, N. E., Spencer, J., and Gregory, M., *Linguistics and Style*, Oxford University Press, London, 1964, p. 73.

2) Firth, J.R., 'A Synopsis of Linguistic Theory', Op. Cit., p. 181.

colloquial English is usually collocated with expressions of personal reference and address, and it rarely collocates with the plural. Thus, the word 'ass' is in familiar and habitual company in such collocations as 'Don't be such an ass!', 'You silly ass!', 'What an ass he is!' Again, "it can be safely stated that part of the 'meaning' of *cows* can be indicated by such collocations as *They are milking the cows, Cows give milk.* The words *tigresses* or *lionesses* are not so collocated and are already clearly separated in meaning at the *collocational level.*"[1] In English typical collocations for the names of months or days like Sunday, Monday, Friday.. etc. furnish interesting material and would certainly separate them from corresponding words in other languages. For example, the word Friday in English tends to collocate with words like 'Good' and 'Black', whereas in Colloquial Egyptian Arabic the word [ʔiggumʕa] (Friday) collocates with [ṣala:h] (prayer), [ʔilyati:ma] (literally orphan), [sa:ʕa naḥs] (an hour of bad omen) and [ʔilḥazi:na] (lit. sad).

However, lexical statements at present have a much less elaborate framework and much less definiteness than grammatical statements. This can be proved by another example from English. A clause like 'they were received' contrasts in English with 'they

1) Ibid., p. 180.

receive' in one grammatical system, and with 'he was received' in another, but it is difficult to describe the difference between 'receives', 'visits', 'comes', 'entertains' ..etc., in the same way. All that we can say is that such items tend to occur usually with items like 'guest', 'host', 'party' ..etc. Further, whereas we can collect a great number of, say, the nominal or the verbal group in English and make descriptive statements about their occurrence, we cannot find similar general categories which occur a certain number of times in a sentence, let alone the difficulty of finding an adequate way for collecting a few thousand occurrences of any lexical item. We may say that lexical description at its present stage has not yet attained the status of a theory.[1]

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1) For more details, see Sinclair, J. McH., 'Beginning the Study of Lexis', in Bazell, Catford, Halliday and Robins (editors), *In Memory of J. R. Firth,* Longmans, London, 1966, pp. 410-430. In British Linguistics, it seems that two types of approach to the study of collocation are to be distinguished. The first approach which is represented in this section lays emphasis on the co-occurrence of lexical items without any kind of grammatical prerequisite. The term 'node' or 'nodal item' is more often associated with this type. The advocates of the second approach maintain that collocations should be considered within statable grammatical frames to guarantee their occurrence. In other words, there is a syntactical component in any admissible collocation, otherwise any lexical item can collocate with any other. For this latter type, see Mitchell, T.F., 'Syntagmatic Relations in Linguistic Analysis' in *Transactions of the Philological Society,* 1958, pp. 101 - 118.

ii. THE DICTIONARY AND THE GRAMMAR

In the preceding section we have pointed out the misleading notion about the division of the lexis of a language into content words and form words. Accodring to this tradition the scope of the dictionary should be confined to content words, and that of grammar to form words. Two similar misleading notions are :

1. that a dictionary deals only with words and a grammar book with all other linguistic forms including units of infra-and supra-word size, i.e. smaller units that words are formed from and larger units of which words are constituent elements.

2. that a dictionary deals with the items of a language considered separately, and grammar with the abstract relations among these items.

Both these statements are unsatisfactory from the standpoint of modern linguistics. A 'word' in many languages like Arabic and English belongs to both the grammar and the dictionary, although the descriptive processes employed are not the same in the two cases, e.g. prepositions and many other particles. Likewise, grammar and dictionary deal both with items of the language and with the abstract relations which obtain among these items, though more abstraction is possible on the side of grammar than on that of lexis.

A more serious fallacy about the distinction between the dictionary and the grammar is that the former deals only with 'meaning' and the latter with 'form'. We have already stated that 'form' is part of meaning, not opposed to it, and both grammar and dictionary are concerned with meaning in the Firthian sense. Another mistaken view in this connection is that the dictionary serves only as an exemplification of grammar. We have proved that the establishment of grammatical categories and lexical categories can be conducted on independent considerations. The formal company that a lexical item keeps is the definition of this item in descriptive terms. For example, the word 'tree' is defined by its habitual association with 'stem', 'trunk', 'branches', 'leaves'.. etc. which distinguish the word 'tree' at the collocational level from a word like 'book' which collocates with 'leaves' but not with 'stem' 'trunk' or 'branches'; from a word like 'elephant' which collocates with 'trunk' but not with 'stem' 'branches' or 'leaves'. This distinction by collocation separates also words which are graphologically similar, e.g. the word 'pound' enters into two distinct collocational ranges, the first comprises items like weight, ounce, flesh.. etc., and the second comprises items like sterling, money, account, note, coin, shilling.. etc. These two lexical sets establish the two lexical items as two different words. The same is true with words like 'bank', 'case', 'mail', 'account'.. etc.;

each constitutes a member of two different lexical sets.

The available dictionaries do not employ such formal analysis in the treatment of their entries, although this type of analysis is more objective and observational than the referential semantic criterion. In fact, a thesarus in which the linguistic distribution of lexical items is considered in terms of their collocability is needed to fill the gap in the extant dictionaries. Such a thesarus "would also be a complement, in formal description, to the grammars of the language. 'Fear' and 'hope', 'beautiful' and 'attractive', these pairs may be beyond grammatical distinction, but they may well be distinguished lexically according to their different collocational ranges and their membership of different sets."[1]

In English, the formal description of lexis found in even great works as 'Oxford English Dictionary' and 'Webster's Third International Dictionary' is limited. Lexical information is provided by the citation of examples of typical sentences in which a given word is used, but it rarely includes the distinctive relevant features of the contexts of situation which correlate with this word. Furthermore, dictionaries like 'Oxford English Dictionary' include historical facts such as the old forms of the words, their historical development in the different stages of the language,

1) *Linguistics and Style,* Op. Cit., p. 75.

or their status as loan - words from a foreign language. From the descriptive point of view, such information is irrelevant to the statement of lexical facts of a language at a particular period.

Although the demarcation line between grammar and dictionary is not so determinate, yet it is practical to assign to the dictionary the task of explaining the particular relations among the items of the language, and to leave to the grammar - book all that comes under general rules. A good dictionary, in Robins' opinion, should, among other things :

1. transcribe the pronunciation of each word in an unambiguous way

2. assign the word to its grammatical class : "In most cases such a class assignment is all that the dictionary needs to do as far as the grammatical level is concerned; the rest of the grammatical information about it may be found in the appropriate parts of the grammatical description." [1]

3. state the irregular forms since they cannot be grouped under the regular members of the grammatical class, such as the conjugation of irregular verbs in English

1) Robins, *General Linguistics, an Introductory Survey*, Op. Cit., p. 64.

4. provide brief semantic information, and keep reference to the use of words to minimum, since 'no entry could possibly list every potential use in a sentence'[1]

5. give a succinct description of the distinctive relevant features of the contexts of situation in which the typical sentences cited are used. This is much more helpful than the provision of synonyms or, in the case of dictionaries of foreign languages, approximate translation equivalents

6. distinguish different meanings of the same word by the statement of the lexical company each usage keeps

7. treat homophones (words similar in pronunciation) as multiple entry, not under the same entry, e.g. bear (the animal) and bear (endure)[2].

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1) Ibid., p. 64.

2) Ibid., p. 66.

8. VARIETIES OF LANGUAGE

One of the important aspects of language study is that of geographical and social differences in speech. Among the terms suggested for the study of these differences are *language* and *dialect*. These should be considered as abstractions used conveniently for the study of linguistic phenomena in speech communities. It is an established fact that no two individuals speak similarly, and that even no two utterances of a given language are identical. However, when differences between geographical forms of speech are great, these are called languages, but if these differences are comparatively small, these are called dialects. A language often consists of a group of dialects. A dialect is the sum of the speech habits of single speakers in a given region. The smallest unit on the scale of dialects is called *idiolect* which is the speech habits of a single speaker.

It should be noted that even these individual habits vary from one situation to another. Every person plays different social roles in his life-time, every role is correlated with a different 'style'. In the staff-room one uses a different style from that he uses at home

as a father or a husband. One addresses one's members of the family in a different type of speech from that one uses in addressing strangers or inferiors and so on. Social status, age, sex, geographical origin of the speaker, educational standard, and wealth are among the variable factors determining the situations correlated with the different styles.

The study of dialect formation and development is made in terms of the distinctive linguistic features that separate one area from another. A line delimiting a statable linguistic feature is termed an *isogloss.* A linguistic change in a given speech community can be dealt with in terms of the emergency and direction of isoglosses on a dialect map. These isoglosses are mere statistical abstractions which are not concrete or observable phenomena in dialect areas. Groups or bundles of isoglosses usually mark off one region exhibiting certain phonological, grammatical and lexical features from another region exhibiting different features at the same place in the language. In other words, dialect boundaries are described in terms of the presence of bundles of isoglosses. We may notice that there is no sharp line of demarcation on either side of a dialect boundary. Dialect boundaries are often indeterminate and apt to conflate with each other, i.e. the transition from one dialect area to another is gradual rather than abrupt. A typical example is that of the German language : "Here we have to recognize three,

and possibly four, different language communities. The Flemings, in Belgium, speak Flemish... ; the Dutch speak Dutch ; Germanic speakers in Switzerland regard themselves, in general, as speaking a distinct 'Swiss-German'. The Germans and the Austrians, and the Swiss in certain circumstances, regard themselves as speaking German. But over the whole of the area there is one unbroken dialect continuum, with very few instances of a clear dialect boundary ; ranging from the High German of Switzerland, Austria and Bavaria to the Low German of Northwest Germany, Holland and Belgium."[1] However, dialect boundaries may coincide with physical boundaries, e.g. a mountain range or a sea that bars communication among people on both sides, or they may be based on no physical boundaries at all as is the case with the Lower Egyptian and the Upper Egyptian dialects or with the dialect boundary extending in the United States from east to west in the middle of Ohio, Indiana and Illinois.[2] The difficulty in delimiting dialect boundaries and in the drawing of a clear picture of dialect situation in many parts of the world is due to various considerations such as "complexities of topography, settlement history, interregional communication, and prestige of regional centres."[3]

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1) *The Linguistic Sciences and Language Teaching*, Op. Cit., pp. 82-83.
2) See Gleason, *An Introduction to Descriptive Linguistics*, Op. Cit., p. 402.
3) Ibid., p. 403.

It sometimes happens that there are considerable divergencies at all levels among the various dialects of a given community. If these divergencies continue to increase, a situation in which lack of intelligibility among the people of the community may be created. This will lead to the appearance of a dialect which acts as a medium of communication among the different dialects. This is called a *lingua franca*. For example, in Communist China there are six main dialects among which there is no mutual intelligibility. The Mandarin dialect then developed as a kind of a lingua franca or a 'standard language'. This does not mean that a 'standard language' carries a higher prestige than the other varieties of the language. Certain reasons usually help one variety to attain the position of a 'standard language'. A clear example is the rise of the East Midland dialect in England in the late 14th century and in the course of the 15th. First of all, it was the dialect of the capital, London, which was the political and commercial centre of England. Secondly, this dialect shared some of the distinctive features of the northern and southern dialects, especially at the phonological and grammatical levels. Third, the region where this dialect was used, i.e. the East Midland district, was more densely populated than the other dialect areas. Fourth, this was the region where such famous seats of learning as Oxford and Cambridge were situated. Fifth, Chaucer's

influence in the spread of this dialect as a written standard should not be underrated. Finally, the introduction of printing in England in 1476 by Caxton who used London English in his translations contributed greatly to the wide spread of this variety of the language and to its final acceptance as 'standard'. [1] A standard language is then a dialect like any other dialect. It is a mere convenience used by a community for purposes of effective communication among its members. Sometimes it is the language of one particular district as we have seen with the London dialect, and sometimes it is a mixture of features of various dialects as in modern German and Italian. Modern literary Italian is a composite of many dialectal features, although it was originally based on the speech of Tuscany. [2]

Two important factors which govern dialect development are termed by De Saussure 'esprit de clocher' (provincialism) and 'force d'intercourse' (power of communication). These two forces work in opposing directions: "provincialism keeps a restricted linguistic community faithful to its own traditions" whereas "intercourse spreads language and gives it unity." [3] With the prevalent facilities of communication among

1) See Baugh, A.C., *A History of the English Language*, Routledge & Kegan Paul Ltd., London, second edition, 1968, pp. 231-235.

2) Gleason, *An Introduction to Descriptive Linguistics*, Op. Cit., p.428.

3) De Saussure, *Course in General Linguistics*, Op. Cit., p. 206.

the people, the high degree of industrialization and urbanization, the increasing mobility among the members of different dialect communities within the same country, and the spread of universal education, the dialect situation at present is more affected by the 'force d'intercourse' than by the 'esprit de clocher'. The former has become a powerful factor in decreasing the gaps between dialect divisions.

Leaving the geographical divergencies aside, language varieties are also correlated with social differences. In a socially stratified community three types of speech may be broadly recognized:

1. Cultivated Speech: This is the variety used by educated people, especially in urban centres among the members of the upper and middle classes. The differences between the speakers of this type of speech in a given community are usually less marked than the differences in speech of less educated people in rural districts within the same community even if the former live in rather distant areas. For example, the divergencies between the speakers of the cultivated urban variety of the Egyptian dialect in the urban centres of the Delta like Cairo, Alexandria, Tanta, Port-Said and the other capitals of the Delta governorates are less marked than those between the speakers of the rural varieties.

This cultivated type of speech is normally the one learnt in schools and used as a means of communica-

tion in mass media like the radio and the television. It is also the type that the people look upon as carrying high prestige among the other types. Besides, it accommodates only a small number of regional traits. This is why the speakers of this non-regional type, e.g. the Received Pronunciation speakers in England, are more 'fortunate' than the speakers of other varieties of the same language, since they are automatically preferred in certain official posts such as those of broadcast announcers.

2. Folk Speech: This type is used in rural localities among isolated groups of people. It is apt to disappear in many communities.

3. Common Speech: This includes the "greater part of the range of intergradation between the other two." [1]

The urban and rural dialects are often the target of severe criticism by the speakers of the other varieties of the language. They are often accused of being 'inefficient', 'slipshod', 'harsh', 'guttural', 'bad' and so on. These value judgements are unhealthy attitudes, from the linguist's standpoint. These judgements may be either the result of individual prejudice or a social 'myth' that has been encouraged and disseminated by the society. They are often learnt by the members of

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1) Gleason, Op. Cit., p. 405.

the community who grow accustomed to the pronouncement of such judgements. From the scientific viewpoint, there is no evidence whatever that one language or variety of language is more 'efficient', 'careful', 'elegant', 'musical' or 'better' than another. Any language that fulfills its main objective in effecting communication among the members of the community is as 'good' as any other language. Further, there are no 'primitive' languages and 'civilized' languages, but we may say that in our modern world certain languages are more developed than others, in the sense that they have been more adapted for the expression of difficult ideas in science and technology, and of lofty thoughts and emotions in literature. This does not deny the fact that all languages are well capable of being developed as a medium used for the same purposes.

However, there is an increasing interest in the scientific study of dialects in speech communities. This branch of linguistics is known as *Dialectology*. Numerous dialect surveys have been conducted in the United States and Europe, for instance the national surveys for the various English dialects such as the Yorkshire, the Scottish and the Welsh dialects. The significance of the study of dialectal varieties, together with the procedures and principles involved in this study need not be stressed. First, they provide the linguist with material for precise and accurate state-

ments at all levels. Secondly, they give the linguist a deep and intelligent realization of the consequences of the social functions of language within speech communities and among social groups, e.g. as a unifying or a diversifying factor, and as a reflection of social attitudes of speakers towards their own dialect and towards other dialects in the community. Thirdly, the study of aspects of a language situation in certain communities, e.g. individual dialects, dialects in contact, degree of intelligibility among the different varieties of the language, linguistic changes of certain features, emergence of dialects of high prestige.. etc., may give the linguist a miniature of the linguistic situation in the present world at large, and in the process of the development of languages in the course of generations.

9. WRITING SYSTEMS AND WRITTEN LANGUAGES

A writing system or a script is "a system of visual communication whose symbols stand for items in a language." [1] Two types of writing systems can be distinguished:

1. A morphemic writing system: In this system the symbols represent the grammatical and lexical items of the language. The Chinese script is a typical example. The written symbols are graphic characters (called ideograms) which stand for the formal items of the language. Each character may be considered as a separate morpheme in the language, whether this morpheme is a whole word or part of a word. Such type of script needs several thousands of symbols. It is said that it takes some 3,500 symbols to write the whole Modern Chinese, and two or three thousand more to cover the classics. [2] Although such writing system is more

1) Halliday, *The Linguistic Sciences and Language Teaching,* Op. Cit., p. 48.
2) Ibid., p. 48.

accurate in redresenting the spoken forms of the language than the alphabetic writing system, yet the enormous number of symbols required makes this script difficult to learn.

2. A phonemic writing system: The symbols in this system represent the phonological items of the language. English, French, Italian and most of the languages of the world are of this kind. These phonemic or alphabetic systems vary as to the degree to which they represent their correlated pronunciations. English, e.g., is well known as a language in which there is a discrepancy between the spelling and the pronunciation. For example, the letters ea stand for different pronunciations in different words:

   tea [ti:]; dread [dred]; break [breik]; create [kri(:)ˈeit]; clear [kliə]; pear [pɛə]; learn [lə:n]; beard [biəd]; hearth [hɑ:θ].[1]

Italian is distinguished by a narrower gap between spelling and pronunciation, whereas French contains a large proportion of unpronounced letters, and hence different spellings for similar sounds or sound sequences, e. g. the words written as donne, donnes and donnent are pronounced [dɔn]. Still, the pronunciation of

1) Wijk, A., *Rules of Pronunciation for the English Language*, Op. Cit., pp. 49-50. For more details on the problem of pronunciation in English, see Section 2, Part II below.

many words in French may be deduced from the spelling, in contradistinction with English. For this reason many attempts have been done to bring the orthographies of languages like English in line with their pronunciations, but these attempts have failed because of the nature of language itself. Since the spoken language tends towards simplification and economy of effort, it is continually changing. On the other hand, the written forms tend to be conservative and fixed because the people's eyes have been accustomed to their shapes in the course of centuries that have followed the invention of printing. Professor Baugh discusses the prospect of English spelling reform:

> "In the early part of the present century a movement was launched, later supported by Theodore Roosevelt and other influential men to bring about a moderate degree of simplification. It was suggested that since we wrote *has* and *had* we could just write *hav* instead of *have*, and in the same way *ar* and *wer* since we wrote *is* and *was*. But though logically sound, these spellings seemed strange to the eye, and the advantage to be gained from the proposed simplifications was not sufficient to overcome human conservatism or indifference or force of habit. It remains to be seen whether the extension of English in the future will some day compel us to consider the re-

form of our spelling from an impersonal and, indeed, international, point of view. For the present, at least, we do not seem to be ready for simplified spelling. " [1]

Certain scripts adopt a single written sign (a grapheme) to indicate a sequence of phonemes. These scripts make use of special signs (called diacritics) to mark consonants when not followed by a vowel. Such writing systems are known as *syllabaries* or syllabic writing systems. The ancient Semitic orthography adopted by the Phoenicians and the Hebrews was of this type. Likewise, the Arabic script used in our Arab countries at present is also a syllabary.

The origin of a written language may sometimes be traced to a specific source as we have seen, for example, in the East Midland dialect of English. In many other cases the source of the written language is not clear, as in modern literary Italian which is an aggregate of features pertaining to various regional dialects.

It may also be noted that one common written language may be known in an area with a variety of spoken dialects or languages. The written Arabic language used in the Arab countries in the Middle East is a case in point. It contains less dialectal

1) Baugh. *A History of the English Language*. Op. Cit., p. 14.

variation than the correlated spoken dialects. There is also one written German language in Germany, Austria, a large part of Switzerland and other limited parts in European countries, whereas there are great divergencies in the associated spoken dialects in these areas. On the contrary, one spoken dialect may be common in an area where two or more different written languages are used. For example, in the Netherlands and the neighbouring districts of Germany the spoken dialects are more or less similar, whereas the written languages used in the two areas are different. These examples show that "the geographic and social limits of written languages are not necessarily correlated with those of spoken languages." [1]

However, a common written language like Arabic, German or Italian acts as a unifying factor among the Arabs, Germans or Italians. Arabic is one of the forces that help to integrate the Arab peoples socially as well as culturally into one unified nation. It serves, among other things, as a medium for the spread of a similar pattern of culture, and for the development of a thriving and vigorous literature in the whole Arab region. Since this common written language, whether we call it Classical Arabic or Modern Classical Arabic, is closely related to the sacred language of the Koran, it is going to survive the repeated

1) Gleason, *An Introduction to Descriptive Linguistics*, Op. Cit., p .427.

attempts made to encourage the Arabic regional dialects attain the status of independent languages with the ultimate aim of designing a separate written language for each dialect.

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PART II
ENGLISH PHONETICS



1. WHAT IS PHONETICS ?

In Section 2 Part I we have differentiated between speech and writing. Phonetics is the scientific study of human speech sounds [1]. It is mainly concerned with the production, transmission and reception of these sounds. It makes use of the findings of other sciences like physiology and physics. Speech sounds can be studied from various points of view:

1. They can be studied in terms of the articulatory organs and the processes of the production of these sounds. This branch is called *Articulatory Phonetics*.
2. They can be studied in terms of the sound waves produced by speaking and transmitted through the air. This aspect is referred to as *Acoustic Phonetics*.
3. They can be studied in terms of the reception of sound waves by the hearer's ears whether from the physiological or the psychological

1) The study of written or printed shapes (on a surface) is less developed in comparison with the study of sound sequences in languages. The scientific study of these shapes is sometimes called 'Graphetics' on the analogy of 'Phonetics'.

point of view. This branch of phonetics is called *Auditory Phonetics*.

What concerns us most in the present study is articulatory phonetics: the study of the various organs of speech (tongue, lips, teeth, roof of the mouth..etc.) and the processes involved in the production and discrimination of speech sounds. Once the student of language is aware of the theories and processes behind the articulation of various sounds, his ability to have control over his vocal organs will increase, especially when he is learning a foreign language different from his mother tongue. This theoretical study should be complemented by drills specifically designed to overcome the difficulties caused by the speech habits of the student's native language.

2. THE PROBLEM OF PRONUNCIATION IN ENGLISH

Learners of English as a foreign language are aware of the complicated problem of its pronunciation. The spelling of many English words does not represent the actual pronunciation. The following observations prove this fact :

1. One letter or a group of letters often represent different sounds in different words, e.g.

   i. the letter a in
   any ['eni]; hat [hæt]; father ['fɑ:ðə]; hate [heit]; wash [wɔʃ]; hall [hɔ:l].

   ii. the letter o in
   son [sʌn]; drove [drouv]; prove [pru:v]; shop [ʃɔp].

   iii. the letters ea in
   heat [hi:t]; great [greit]; bread [bred]; heart [hɑ:t]; earn [ə:n], beard [biəd], wear [wɛə].

   iv. the letters ough in
   though [ðou]; fought [fɔ:t]; through [θru:]; cough [kɔf]; enough [i'nʌf]; bough [bau]; hiccough ['hikʌp].

2. On the contrary, one sound is often represented by different letters in different words. Notice the following words which have the same vowel sound:

   he [hi:]; see [si:]; leave [li:v]; believe [bi'li:v]; receive [ri'si:v]; key [ki:]; machine [mə'ʃi:n]; quay [ki:].

The same is true with the vowel sound [ɔ:] in the following words :

   walk [wɔ:k]; adorn [ə'dɔ:n]; lawn [lɔ:n]; sauce [sɔ:s]; course [kɔ:s]; coarse [kɔ:s]; roar [rɔ:]; door [dɔ:]; bought [bɔ:t].

3. Many letters are unpronounced. In each of the following words there is one or more letters that are not pronounced at all :

   knife [naif]; palm [pɑ:m]; receipt [ri'si:t]; column ['kɔləm]; psalm [sɑ:m]; salmon ['sæmən].

The main reason for this gap between English spelling and pronunciation is that "English spelling has remained essentially the same since the days of Caxton and the other early printers in spite of the fact that the language has undergone very sweeping changes in its pronunciation, especially in the case of the vowel sounds." [1]

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1) See Wijk, A., *Rules of Pronunciation for the English Language*, Op. Cit., p. 8.

Phonetic Transcription

The result of such difference is that the learner of English who depends only on ordinary spelling is most of the time at a loss to know the sounds he should use, and continually makes mistakes in the pronunciation of words. In order to overcome this difficulty, a convenient means should be devised to represent the sounds in a clear and accurate way. An alphabet constructed on the basis of one symbol for each phoneme or distinctive basic sound in the language is thus essential for correct pronunciation. This phonetic alphabet is called Phonetic Transcription. By using a phonetic transcription, the learner can avoid all the mispronunciations which are the result of relying on ordinary spelling. But it should be noted that this transcription is useful only to those who have learnt to form adequately the sounds which the phonetic symbols stand for.

The phonetic transcription we are using in this book for the representation of English forms is the International Phonetic Alphabet (abbreviated to IPA). The type of pronunciation we are adopting is that common in the South of England among educated people. This type is termed 'Received Pronunciation'[1] (abbreviated to RP) or 'Educated London English'. In RP there are forty five speech sounds: 21 vowels

1) Jones, D., *An Outline of English Phonetics*, Op. Cit., p. 12.

and diphthongs, and 24 consonants. A complete list of the phonetic symbols representing these sounds is given on the opening pages of this book. However, for practical purposes, it is useful to give numbers to the English vowels and diphthongs. The following table shows a convenient method of numbering them:

i:	i	e	æ	ɑ:	ɔ	ɔ:	u	u:	ʌ	ə:	ə
1	2	3	4	5	6	7	8	9	10	11	12
			ei	ou	ai	au	ɔi				
			13	14	15	16	17				
			iə	ɛə	ɔə	uə					
			18	19	20	21					

3. THE ORGANS OF SPEECH

One of the prerequisites of the correct production of sounds is that the learner should be acquainted with the different organs of speech, the positions they are capable of taking up, and the movements they perform so that they may produce the desired sounds. For our present purposes it is sufficient to be familiar with a brief description of these organs. The following are the most important organs (Diagram 2)

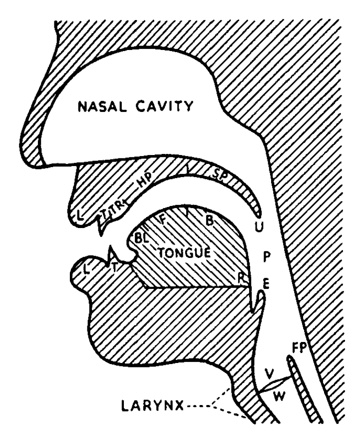


Diagram 2. — The Organs of Speech

LL. Lips.

TT. Teeth.

TR. Teeth-ridge or Alveolar ridge; the gums immediately behind the top teeth.

HP. Hard palate.

SP. Soft palate or Velum.

U. Uvula; the loose hanging end of the soft palate.

P. Pharynx.

BL. Blade of tongue (including the tip); the part lying opposite the teeth-ridge.

F. Front of tongue; the part lying opposite the hard palate.

B. Back of tongue; the part lying opposite the soft palate.

E. Epiglottis.

FP. Food passage.

V. Vocal cords.

W. Windpipe.

The part of the windpipe in which the vocal cords are lying is the *Larynx*.

We may notice that:

1. The teeth-ridge, the hard palate and the soft palate are the three divisions of the roof of the mouth.

2. The blade (including the tip), the front and the back of the tongue are defined according to the part of the roof of the mouth opposite

each when the tongue is lying in its normal position inside the mouth.

3. The vocal cords are situated inside the larynx. They look like small lips stretching from front to back across the top of the windpipe. The space between the vocal cords is called the *glottis.*

4. Some of the organs of speech are fixed and some others are movable. The tongue and lips are the most important movable organs. The tongue is capable of doing various movements, as we shall see later.

   The soft palate can be raised to touch the back wall of the pharynx and in this way closes the passage to the nose. The soft palate is lowered when we breathe through our nose. In the production of the great majority of speech sounds, the soft palate is in the raised position. In English, we notice that the only sounds uttered with the soft palate lowered are the nasal consonants [m], [n] and [ŋ].

   The lower jaw is also capable of being moved upwards and downwards. The movements of the jaw affect the shape of the lips when producing the various vowel sounds. Four lip positions may be distinguished:

i. Spread as in the pronunciation of the English sound [i:].

ii. Neutral as in the pronunciation of the English sound [ɑ:].

iii. Open rounded as in the pronunciation of the English sound [ɔ].

iv. Close rounded as in the pronunciation of the English sound [u:].

The rest of the organs of speech except the vocal cords are fixed.

5. The vocal cords can take more than one position. First, they can be held wide apart. The air may then pass between them, i. e. through the glottis. The sound produced while the vocal cords are in this position is called *breath*. Secondly, they can be pressed tightly together. The air forces its way through and causes them to open and shut, i. e. vibrate, rapidly. The sound produced while the vocal cords are in this position is called *voice*.

Sounds which are pronounced with 'voice' are termed *voiced sounds:* whereas sounds which are pronounced without 'voice' are termed *voiceless sounds*. All English vowels and some consonants like [b], [d], [n], [v], [z] are voiced

sounds. Consonants like [p], [t], [f], [s] are voiceless sounds. It follows from this that

i. All sounds must be either voiced or voiceless, for the vocal cords are either in vibration or not.

ii. English consonants may be arranged in pairs, one member of the pair is voiced and the other member is voiceless, e. g. [b] and [p]; [d] and [t]; [v] and [f]; [z] and [s] and so on.

4. THE CLASSIFICATION OF SOUNDS

i. VOWELS AND CONSONANTS

A vowel sound, according to D. Jones, is "a voiced sound in forming which the air issues in a continuous stream through the pharynx and mouth, there being no obstruction and no narrowing such as would cause audible friction." [1] It follows from this definition that all sounds which are not in agreement with this statement in any detail are consonant sounds, as follows :

1. All sounds which are voiceless are consonants, e.g. [k], [f], [θ].
2. All sounds in the production of which the air does not pass through the mouth are consonants, e.g. the nasal consonants [m], [n] and [ŋ].
3. All sounds in the pronunciation of which the air comes across an obstruction while passing through the mouth are consonants, e.g. [b], [l[.
4. All sounds in the pronunciation of which there is audible friction are consonants, e.g. [f] [s], [z], [ʒ].

1) Jones, D., *An Outline of English Phonetics*, Op. Cit., p. 23.

ii. THE CARDINAL VOWELS

In order to determine the tongue positions of the English vowels or the vowels of any language, a number of vowel sounds of fixed qualities and with fixed tongue and lip positions have been devised. These sounds are used as a system of standard vowels, i.e. any vowel from any language can be described with reference to these vowels. These are called *Cardinal Vowels.* There are two criteria according to which vowels are classified :

1. the part of the tongue which is highest in the mouth and
2. the extent to which that part is high.

The Cardinal Vowels are chosen from vowels which have tongue positions at the extreme limit of the tongue's possible movement in each direction. These are eight in number.

The following diagram (Diagram 3) shows the relative tongue positions of the eight Cardinal Vowels.

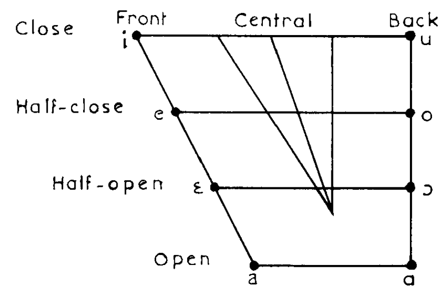


Diagram 3. — Tongue positions of the Cardinal Vowels

The point marked shows the highest part of the tongue for each vowel. The following terms are used in describing the points marked on the diagram :

1. Vowels in the pronunciation of which the front of the tongue is raised in the direction of the hard palate are termed *Front Vowels*, those in the production of which the back of the tongue is raised in the direction of the soft palate are called *Back Vowels*, and those in which a part between the front and the back, i.e. the middle, of the tongue is raised are called *Central Vowels*.

2. Vowels in the articulation of which the tongue is as low as possible in the mouth are termed *Open Vowels*, those in the pronunciation of which the tongue is raised to its fullest limit, i.e. as high as possible, are called *Close Vowels*, those in the formation of which the tongue occupies a position approximately one-third of the distance from close to open are called *Half-close Vowels*, whereas vowels in the formation of which the tongue occupies a position approximately two-thirds of the distance from close to open are termed *Half-open Vowels*.

Accordingly, the Cardinal Vowels may be described as follows :

Cardinal Vowel No. 1 symbolized i is a close front vowel. In other words, i is the sound in which the raising of the front of the tongue is as forward as possible and as high as possible.

» » No. 2 symbolized e is a half-close front vowel.

» » No. 3 symbolized ɛ is a half-open front vowel.

» » No. 4 symbolized a is an open front vowel.

» » No. 5 symbolized ɑ is an open back vowel, i.e. a sound in which the back of the tongue is lowered as far as possible and retracted as far as possible.

» » No. 6 symbolized ɔ is a half-open back vowel.

» » No. 7 symbolized o is a half-close back vowel.

» » No. 8 symbolized u is a close back vowel.

From the description of the Cardinal Vowels, it is clear that the tongue position of any vowel can be described in relation to these fixed or standard tongue positions, as we shall see in the study of the English vowels in the next section.

5. THE ENGLISH VOWELS

There are twelve important vowel sounds in English. These are called 'pure' vowels. In the production of these vowels, the organs of speech remain in a certain position, i. e. stationary, for a considerable period of time, while the vocal cords are in vibration. These vowel sounds are symbolized by:

[i:]	[i]	[e]	[æ]	[ɑ:]	[ɔ]	[ɔ:]	[u]	[u:]	[ʌ]	[ə:]	[ə]
1	2	3	4	5	6	7	8	9	10	11	12

Each of these vowels can be referred to either by its phonetic symbol or by its number. The following diagram (Diagram 4) shows the tongue positions of these vowels:

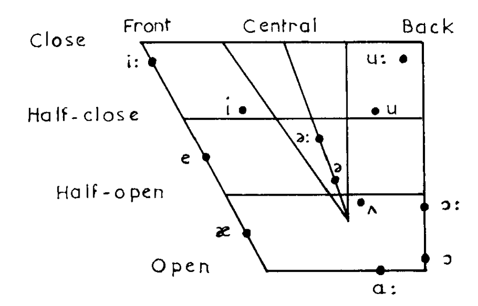


Diagram 4. — The English Pure Vowels

Description of the English Vowels:

English Vowel [i:]

1. The front of the tongue is raised nearly to the close position.
2. The lips are spread or neutral.
3. There is only a small space between the jaws.

For this and the following vowels, the soft palate is raised, the vocal cords are in vibration, and the tip of the tongue is either touching the lower teeth or is slightly drawn back from them.

Various Spellings of [i:]

The [i:] sound is commonly represented by the letter e, especially double e, for example green [gri:n]; tree [tri:]; see [si:]; even ['i:vn]; complete [kəm'pli:t]; immediate [i'mi:djət].

It is also the sound of ea, ie, ei, and i in numerous words such as sea [si:]; east [i:st]; field [fi:ld]; seize [si:z]; machine [mə'ʃi:n]. There are exceptional words with different spellings such as key [ki:]; quay [ki:] and people ['pi:pl].

English Vowel [i]

From Diagram 4 we may notice that the tongue position for [i] is lower and more drawn back than

that for [i:]; it is half-way between the position of a proper front vowel and that of a central vowel.

Description of [i]

1. The front of the tongue is raised, but the raising is drawn back from the proper front position.

2. The tongue is raised to a position slightly higher than half-close.

3. The lips are either spread or neutral, and the space between the jaws is a little wider than for [i:]

Spellings of [i]

[i] is usually the sound representing the vowel letters i and y, for example fit [fit]; rich [ritʃ]; king [kiŋ]; symbol ['simbl̩]; city [siti].
[i] is also the sound of e and a in many prefixes and suffixes when these are weakly stressed, e.g.

become [bi'kʌm]; descend [di'send]; remain [ri'mein]; engage [in'geidʒ]; except [ik'sept]; explain [iks'plein]; examine [ig'zæmin]; places ['pleisiz]; houses ['hauziz]; useless ['ju:slis]; goodness ['gudnis]; waited ['weitid]; private ['praivit]; separate (adj.) ['sepərit]; estimate (n.) ['estimit].

There are also exceptional words like :

minute ['minit] ; busy ['bizi] ; women ['wimin] ; Sunday ['sʌndi]; Monday ['mʌndi]; England ['iŋglænd]; English ['ingliʃ;] lettuce ['letis]; pretty ['priti].

English Vowel [e]

1. The front of the tongue is raised.

2. It is raised to a point half-way between half-close and half-open.

3. The lips are spread or neutral, and the opening between the jaws is medium.

Spellings of [e]

[e] is usually the sound of the letter e, e.g. hen [hen]; send [send]; seven ['sevn].. etc. [e] is also the sound of ea in numerous words, e. g. bread [bred]; thread [θred]; breath [breθ]; head [hed]; ready ['redi]. Exceptional words are: any ['eni]; many ['meni]; friend [frend]; Thames [temz]; ate [et]; said [sed]; says [sez].

English Vowel [æ]

1. The front of the tongue is raised.

2. It is raised nearly to a point half-way between half-open and open.

3. The lips are spread or neutral, and the opening between the jaws is medium to wide.

Spellings of [æ]

[æ] is usually the short sound of the letter a, e.g. glad [glæd]; cat [kæt]; lamp [læmp]..etc.

There are also exceptional words such as: plait [plæt]; plaid [plæd]; have [hæv] (in its strong form)[1]; bade [bæd].

English Vowel [ɑ:]

1. The back of the tongue is raised, but the raising is advanced from the true back position. In other words, the part of the tongue which is highest in the mouth is a point somewhat in advance of the 'back'.
2. The tongue is at the fully open position.
3. The lips are neutral, and the opening between the jaws is medium to wide.

Spellings of [ɑ:]

[ɑ:] is the regular sound of the letters ar when final in the word or when followed by a consonant, e.g.

far [fɑ:]; car [kɑ:]; part [pɑ:t]; garden ['gɑ:dn].

[ɑ:] is also the sound of the letter a preceding silent l in a number of words such as :

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1) For Strong and Weak Forms in English, see Section 7 below.

calm [kɑ:m]; half [hɑ:f]; calf [kɑ:f]; palm [pɑ:m]·

[ɑ:] is also common in several words in which the letter a is followed by ff, ss or by f, s, n followed by another consonant, e.g.

staff [stɑ:f]; grass [grɑ:s]; after ['ɑ:ftə]; last [lɑ:st]: ask [ɑ:sk]; plant [plɑ:nt].

In some foreign words the letter a is pronounced [ɑ:], e.g.
barrage ['bɑrɑ:ʒ]; moustache [məs'tɑ:ʃ]; drama ['drɑ:mə]; tomato [tə'mɑ:tou]; vaze [vɑ:z].

Notice also the pronunciation of the following words:
ah [ɑ:]; are [ɑ:] (in its strong form); aunt [ɑ:nt]; draught [drɑ:ft]; laugh [lɑ:f]; example [ig'zɑ:mpl]; father ['fɑ:ðə]; rather ['rɑ:ðə]; heart [hɑ:t]; hearth [hɑ:θ]; clerk [klɑ:k]; sergeant ['sɑ:dʒənt].

English Vowel [ɔ]

The tongue position for [ɔ] is very near to that of Cardinal Vowel No. 5, but the English vowel is pronounced with slight open lip-rounding.

1. The back of the tongue is highest in th mouth.
2. The tongue is near the fully open position.
3. The lips are open rounded, and the opening between the jaws is medium to wide.

Spellings of [ɔ]

[ɔ] is usually the short sound of the letter o, e.g.
not [nɔt]; pond [pɔnd]; cross [krɔs]; cost [kɔst];

cloth [klɔθ]; off [ɔf]; often ['ɔfn]; sorry ['sɔri]; solid ['sɔlid].

[ɔ] represents also the letter a when preceded by [w] and not followed by [k], [g] or [ŋ], e.g.

want [wɔnt]; what [wɔt]; squash [skwɔʃ]; quality ['kwɔliti]; wander ['wɔndə]; quarrel ['kwɔrəl]; but notice, e.g. wax [wæks], wag [wæg] and twang [twæŋ] in which the vowel is followed by [k], [g] and [ŋ] respectively.

Exceptional words are :

gone [gɔn]; shone [ʃɔn]; because [bi'kɔz]; cauliflower ['kɔliflauə]; laurel ['lɔrəl]; knowledge ['nɔlidʒ]; acknowledge [ək'nɔlidʒ]; Gloucester ['glɔstə]; yacht [jɔt]; cough [kɔf]; trough [trɔf].

English Vowel [ɔ:]

For this vowel, the tongue is slightly lower in the mouth than for Cardinal Vowel No. 6, but the lips are more closely rounded.

1. The back of the tongue is raised.
2. It is raised nearly to the half-open position.
3. The lips are between open and close rounding, and the distance between the jaws is medium to fairly wide.

Spellings of [ɔ:]

[ɔ:] is the regular sound of the letters aw and au, e.g.

saw [sɔ:]; lawn [lɔ:n]; awkward ['ɔ:kwəd]; author [ɔ:θə]; sauce [sɔ:s]; autumn ['ɔ:təm].

[ɔ:] is also the regular sound of or when these are final or followed by a consonant, e.g.

nor [nɔ:]; short [ʃɔ:t]; form [fɔ:m]; north [nɔ:θ].

The letters ough are also pronounced [ɔ:] when followed by t such as :

bought [bɔ:t]; thought [θɔ:t] ; fought [fɔ:t] (with the exception of drought [draut]).

The letters ore, oar, our are commonly pronounced either [ɔ:] or [ɔə], e.g.

more [mɔ:] or [mɔə]; roar [rɔ:] or [rɔə]; board [bɔ:d] or [bɔəd]; four [fɔ:] or [fɔə]; pour [pɔ:] or [pɔə]; course [kɔ:s] or [kɔəs].

[ɔ:] represents also the letter a when followed by l final or l + consonant, e.g.

all [ɔ:l]; tall [tɔ:l] ; halt [hɔ:lt].

It also commonly represents the letters ar when preceded by [w] and followed by a consonant, e.g.

warm [wɔ:m]; swarm [swɔ:m]; quarter ['kwɔ:tə].

Exceptional words are:

door [dɔ:] or [dɔə]; floor [flɔ:] or [flɔə]; broad [brɔ:d]; abroad [ə'brɔ:d]; water ['wɔ:tə]; wrath [rɔ:θ].

English Vowel [u]

1. The back of the tongue is raised, but the raising is advanced from the true back position.
2. The tongue is raised slightly above the half-close position.
3. The lips are fairly closely rounded, and the opening between the jaws is medium.

Spellings of [u]

[u] is usually the short sound of the letter u, e.g.
put [put]; full [ful]; push [puʃ]; bush [buʃ].

[u] usually represents the letters oo when followed by k, e.g.
look [luk] ; book [buk] ; cook [kuk] ; also in the following individual words:
foot [fut]; good [gud]; hood [hud]; stood [stud]; wood [wud]; wool [wul].

In the following words the letters oo may be pronounced either [u] or [u:]:
broom [brum] or [bru:m] ; groom [grum] or [gru:m]; room [rum] or [ru:m].

Notice the pronunciation of the following various words:
bosom ['buzəm]; bouquet ['bukei]; wolf [wulf]; woman ['wumən]; Worcester ['wustə]; could [kud] (strong form); would [wud] (strong form); should [ʃud] (strong form).

English Vowel [u:]

The tongue position of this vowel is rather lower

and more advanced than Cardinal Vowel No. 8.

1. The back of the tongue is raised.
2. It is raised nearly to the close position.
3. The lips are closely rounded, and the opening between the jaws is narrow to medium.

Spellings of [u:]

[u:] is the 'long' sound of the letter u, e.g.

rule [ru:l]; June [dʒu:n]; true [tru:]; tube [tju:b]; music ['mju:zik]; future ['fju:tʃə].

[u:] is also the usual sound of eu, ew, ui, for example

feud [fju:d]; new [nju:]; crew [kru:]; fruit [fru:t].

[u:] represents the letters oo in the majority of words in which the oo are not followed by either r or k, e.g.

too [tu:]; food [fu:d]; soon [su:n]; cool [ku:l]; but notice, e.g. floor [flɔ:]; took [tuk].

The letter o has the sound [u:] in the following words:

ado [ə'du:]; lose [lu:z]; move [mu:v]; prove [pru:v]; tomb [tu:m]; who [hu:]; whom [hu:m]; do [du:] (strong form); to [tu:] (strong form).

The letters ou have the sound [u:] in a number of words:

routine [ru:'ti:n]; soup [su:p]; group [gru:p]; rouge [ru:ʒ]; route [ru:t]; through [θru:]; wound [wu:nd]; you [ju:]; youth [ju:θ].

Exceptional words are:

beauty [bju:ti]; shoe [ʃu:]; canoe [kə'nu:]; manoeuvre [mə'nu:və].

English Vowel [ʌ]

1. The middle of the tongue is raised.
2. It is raised to the half-open position or slightly lower.
3. The lips are spread, and the opening between the jaws is wide.

Spellings of [ʌ]

The letter u is commonly pronounced [ʌ], e.g.

cut [kʌt]; thrust [θrʌst]; hurry ['hʌri]; button ['bʌtn].

The letter o has also the sound [ʌ] in numerous words, e.g.

among [ə'mʌŋ]; month [mʌnθ]; comfort ['kʌmfət]; company ['kʌmpəni]; constable ['kʌnstəbl]; London ['lʌndən]; Monday ['mʌndi]; monk [mʌŋk]; onion ['ʌnjən]; glove [glʌv]; oven ['ʌvn]; thorough ['θʌrə]; worry ['wʌri]; twopence ['tʌpəns].

The letters ou are also pronounced [ʌ] in a few words, e.g.

courage ['kʌridʒ]; country ['kʌntri]; cousin ['kʌzn]; couple ['kʌpl]; enough [i'nʌf]; flourish ['flʌriʃ]; nourish ['nʌriʃ]; southern ['sʌðən]; hiccough ['hikʌp].

Exceptional words are:

does [dʌz]; blood [blʌd]; flood [flʌd].

English Vowel [ə:]

1. The central part of the tongue is raised.
2. It is raised to a point nearly half-way between half-close and half-open, or a little higher.
3. The lips are spread, and the distance between the jaws is narrow.

Spellings of [ə:]

[ə:] is the normal sound of stressed - er, - ir, - ur, - yr when final or followed by a consonant, e.g.

her [hə:]; fern [fə:n]; fir [fə:]; third [θə:d]; fur [fə:]; burn [bə:n]; myrtle ['mə:tl].

[ə:] is usually the sound of the letters ear when followed by a consonant, e.g.

earn [ə:n]; earth [ə:θ]; heard [hə:d] (with the exception of beard [biəd]; heart [hɑ:t]; hearth [hɑ:θ]).

[ə:] is generally the sound of the letters or when preceded by w, e.g.

work [wə:k]; worth [wə:θ]; world [wə:ld]; word [wə:d] (with the exception of worn [wɔ:n]; worry ['wʌri]).

[ə:] is the sound of the letters our in the following individual words :

courteous ['kə:tjəs]; courtesy ['kə:tisi]; journal ['dʒə:nl]; journey ['dʒə:ni].

Exceptional words are:

colonel ['kə:nl]; amateur ['æmətə:]; connoisseur [kɔni'sə:]; chauffeur [ʃou'fə:]; attorney [ə'tə:ni].

English Vowel [ə]

This is sometimes called the 'neutral vowel' or 'schwa'. Although there are various allophones of this phoneme, two important variant pronunciations may be distinguished:

The first variant has nearly the same tongue position as that for [ə:], but [ə] is pronounced very short and always occurs in weakly stressed syllables. It never occurs in final position.

Spellings of [ə]

[ə] is the sound of the following letters:

a, e.g. about [ə'baut]; breakfast ['brekfəst]; attempt [ə'tempt]; gentleman ['dʒentlmən].

ar, e.g. particularly [pə'tikjuləli]; forward ['fɔ:wəd].

e, e.g. pavement ['peivmənt].

er, e.g. modern ['mɔdən]; manners ['mænəz].

i, e.g. horrible ['hɔrəbl].

o, e.g. method ['meθəd]; Europe ['juərəp].

or, e.g. effort ['efət].

oar, e.g. cupboard ['kʌbəd].

u, e.g. column ['kɔləm]; chorus ['kɔ:rəs].

ou, e.g. famous ['feiməs].

[ə] is also the sound of the vowel e in the definite article the [ðə] (weak form) before consonants, and the sound of the indefinite article a [ə] (weak form).

The second variant is the sound used finally before a pause. It is opener than the first variant and sounds more like [ʌ]. It also occurs in weakly stressed syllables, like the first variant. We shall refer to the second variant as 'Lowered [ə]'. In the pronunciation of the 'Lowered [ə]'

1. The central part of the tongue is raised.
2. It is raised nearly to the half-open position or a little higher.
3. The lips are spread, and the opening between the jaws is medium.

Spellings of 'Lowered [ə]'

The Lowered [ə] is the sound of the following letters which occur finally and before a pause :

— a, e.g. China ['tʃainə]; sofa ['soufə]; villa ['vilə].
— ar, e.g. collar ['kɔlə]; dollar ['dɔlə].
— er, e.g. manner ['mænə] ; over ['ouvə] ; better ['betə] ; father ['fɑ:ðə].
— or, e.g. actor ['æktə] ; doctor ['dɔktə].
— our, e.g. colour ['kʌlə] ; honour ['ɔnə].
— ough, e.g. thorough ['θʌrə] ; borough ['bʌrə].
— ure, e.g. picture ['piktʃə]; nature ['neitʃə].
— re, e.g. centre ['sentə].

We may notice that when words containing 'Lowered [ə]' are followed immediately by another word in the same sense-group [1], the 'Lowered [ə]' is not used, e.g.

China tea ['tʃainə ti:] ; over there ['ouvə ðɛə] ; a picture we like [ə 'piktʃə wi: 'laik].

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1) "Sentences are usually divisible into smaller sequences between which pauses *may* be made, though they are not essential. The shortest possible of such sequences (i.e. sequences which are not capable of being further subdivided by pauses) are called *sense-groups*." See Jones, D., *An Outline of English Phonetics,* Op. Cit., p. 274.

6. THE ENGLISH DIPHTHONGS

We have already stated that a pure vowel is a vowel for which the organs of speech remain in a given position for an appreciable period of time. A diphthong is a vowel sound for which the organs of speech start in the position of one vowel and move immediately in the direction of another vowel.

Diphthongs are symbolized in phonetic transcription by a digraph, i.e. a sequence of two letters, the first indicates the position of the organs of speech at the beginning of the movement, and the second indicates their position at the end. English diphthongs may be grouped into two classes in accordance with whether the tongue moves in the direction of a close vowel or a central vowel. These two classes may be termed 'Closing Diphthongs' and 'Centring Diphthongs' respectively.

i. THE CLOSING DIPHTHONGS

This class comprises the diphthongs [ei], [ou], [ai], [au] and [ɔi]. In these diphthongs the tongue moves from an opener to a close position, the ending-point being either [i] or [u]. The following diagram (Diagram 5) shows the position of these diphthongs.

The end-point of the arrow shows the limit of the movement of the diphthong. This limit is not usually reached by most English speakers.

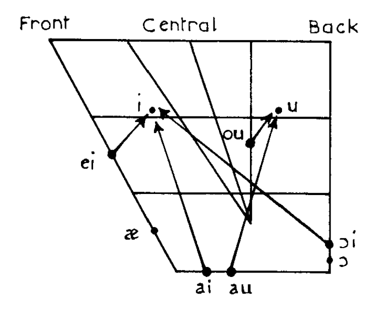


Diagram 5. — The English Closing Diphthongs

DESCRIPTION OF THE CLOSING DIPHTHONGS

English Diphthong [ei]

1. The tongue starts in the position for [e] and moves in the direction of [i].
2. The lips are spread or neutral, and the distance between the jaws is medium at the start, and lessens during the pronunciation of the diphthong.

Spellings of [ei]

[ei] is the so-called 'long' sound of the letter a such as: came [keim]; game [geim]; make [meik].

It is also the usual sound of the letters ai and ay, e.g. rain [rein]; plain [plein]; day [dei]; play [plei].

The letters ei and ea have the sound [ei] in a few words, e.g.

weigh [wei]; vein [vein]; great [greit]; break [breik].

Exceptional words are :

gaol [dʒeil]; bass [beis] (in music); gauge [geidʒ]; halfpenny ['heipəni].

English Diphthong [ou]

1. A part of the tongue in advance of the back is raised.
2. For the beginning of the diphthong this part is raised to a point nearly mid-way between half-close and half-open or slightly higher, and then moves to a closer position in the direction of [u].
3. The lips start slightly rounded, and then the lip-rounding increases during the pronunciation of the diphthong. The opening between the jaws starts medium and then becomes less during the articulation of the diphthong.

Spellings of [ou]

[ou] is the so-called 'long' sound of the letter o, e.g.

so [sou]; home [houm]; noble ['noubl]; roll [roul]; post [poust]; both [bouθ]; only ['ounli]; don't [dount].

[ou] is also the regular sound of oa when not followed by r, e.g.

road [roud]; roast [roust] (with the exception of broad [brɔ:d]); but notice, e.g. roar [rɔ:] or [rɔə].

[ou] represents also the letters ow in many words, e.g. know [nou]; sow (v.) [sou]; growth [grouθ].

[ou] represents the letters ou in the following words: dough [dou]; mould [mould]; poultry ['poultri]; shoulder ['ʃouldə]; soul [soul]; though [ðou].

Exceptional words are:

oh [ou]; brooch [broutʃ]; sew [sou]; bureau [bjuə'rou] or ['bjuərou].

English Diphthong [ai]

1. The front of the tongue is raised.
2. For the beginning of the diphthong the tongue starts low, i.e. at the fully open position, and then moves to a closer position towards English vowel [i].
3. The lips are either spread or neutral, and the opening between the jaws is rather wide at the start, and then lessens during the pronunciation of the diphthong.

Spellings of [ai]

[ai] is the so called 'long' sound of the letters i and y, e.g.

line [lain]; idle ['aidl]; night [nait]; child [tʃaild]; find [faind]; fly [flai]; try [trai].

[ai] is also the sound of the letters ie when final, e.g. pie [pai]; tie [tai]; and in inflected forms such as tied [taid]; cries [kraiz].

[ai] represents the letters ei in the following words: height [hait]; sleight [slait]; either ['aiðə]; neither ['naiðə]; eider ['aidə].

Exceptional words are:

buy [bai]; eye [ai]; choir ['kwaiə]; aisle [ail].

English Diphthong [au]

1. For the beginning of the diphthong a part of the tongue between the front and the centre is raised.
2. The tongue starts at the fully open position; it then moves to a closer position in the direction of English vowel [u].
3. The lips are first neutrally open, and then there is an increasing lip-rounding in the process of producing the diphthong. The jaws start fairly wide, and then the distance between them decreases during the pronunciation of the diphthong.

Spellings of [au]

[au] is the usual sound of the letters ou, e.g.
loud [laud]; house [haus]; out [aut]; bough [bau].

[au] frequently represents the letters ow, e.g.
cow [kau]; town [taun]; flower ['flauə].

[au] is also the sound of the letters eo in the proper noun Macleod [mə'klaud].

English Diphthong [ɔi]

1. The back of the tongue is raised for the beginning of the diphthong.
2. It is raised to a point half-way between the

English vowels [ɔ] and [ɔ:], then the tongue moves in the direction of [i].

3. The lips start fairly rounded, and then are drawn back during the pronunciation of the sound. The jaws start fairly wide apart, and then the distance between them decreases while the lips are spread.

Spellings of [ɔi]

[ɔi] is the regular sound of the letters oi and oy, e.g. boil [bɔil]; noise [nɔiz]; employs [im'plɔiz]; royal ['rɔiəl].

ii. THE CENTRING DIPHTHONGS

This class of diphthongs comprises the sounds [iə]; [ɛə]; [ɔə]; [uə]. For each of these diphthongs the tongue moves in the direction of the central vowel [ə]. If the sound occurs finally before a pause, it will naturally be the 'lowered [ə]'. The following diagram (Diagram 6) shows the position of these diphthongs.

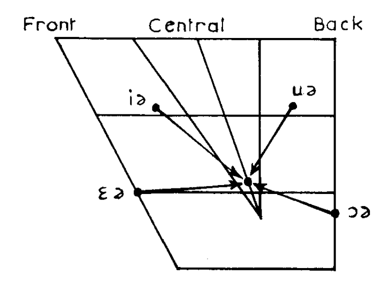


Diagram 6. — The English Centring Diphthongs

English Diphthong [iə]

1. The tongue starts in the position for English vowel [i] and ends nearly at the position for the central vewel [ə].
2. The lips are spread or neutral, and the distance between the jaws is narrow at the beginning and then increases during the production of the diphthong.

Spellings of [iə]

[iə] is the usual sound of eer, e.g.
deer [diə]; peer [piə]; steerage ['stiəridʒ].

[iə] represents also the letters ear, ere, eir, ier, ea, in some words such as :
ear [iə]; beard [biəd]; here [hiə]; weird [wiəd]; pierce [piəs]; fierce [fiəs]; idea [ai'diə].

English Diphthong [ɛə]

1. For the beginning of the diphthong the front of the tongue is raised to a point nearly half-way between the English vowels [e] and [æ], then the tongue moves to [ə].
2. The lips are spread or neutral, and the distance between the jaws is fairly wide.

Spellings of [ɛə]

[ɛə] is the regular sound of the letters air, e.g.
pair [pɛə]; fair [fɛə]; hair [hɛə].

[ɛə] is also the sound of ear and are in numerous words, e.g.

wear [wɛə]; bear [bɛə]; spare [spɛə] ; care [kɛə].

Exceptional words are:

scare [skɛə]; scarce [skɛəs]; aerodrome ['ɛərədroum]; aeroplane ['ɛərəplein].

English Diphthong [ɔə]

1. The tongue starts nearly below half-open position, and then moves to [ə].
2. The lips start with open rounding and then become neutral during the pronunciation of the diphthong. The distance between the jaws is medium to wide.

Spellings of [ɔə]

[ɔə] is the regular sound of the letters oar and ore, e.g. soar [sɔə]; coarse [kɔəs]; core [kɔə]; score [skɔə].

[ɔə] is also the sound of our in some words, e.g. four [fɔə]; course [kɔəs].

It is also the sound of oor in door [dɔə]; floor [flɔə].

English Diphthong [uə]

1. The tongue starts in the position for the vowel [u] and moves to [ə].
2. The lips start rather closely rounded and then become neutral during the production of the diphthong. The distance between the jaws is narrow to medium at the beginning of the

diphthong and then increases during its pronunciation.

Spellings of [uə]

[uə] is the usual sound of the letters ure and oor, e.g.
sure [ʃuə]; cure [kjuə]; endure [in'djuə]; poor [puə]; poorer ['puərə]; moor [muə].

[uə] is also the sound of the letters ur when followed by a vowel, e.g.
curious ['kjuəriəs]; duration [djuə'reiʃn]; security [si'kjuəriti].

[uə] also represents the letters our in some words, e.g.
tour [tuə]; gourd [guəd]; bourse [buəs].

It also stands for the spellings ua, ue and ewe when followed by a consonant letter, the syllable being stressed, e.g.
truant ['tru(:)ənt]; fluency ['flu(:)ənsi]; jewel ['dʒu(:)əl].

7. STRONG AND WEAK FORMS

One of the prominent features in English pronunciation is the existence in many English words (about fifty frequently used words) of two or more pronunciations, a strong form and one or more weak forms. The strong form of a word is the pronunciation it has when said in isolation. This form is also used in connected speech when the word is stressed, but it is also used in certain cases when the word is unstressed. The weak form or forms of a word are used only in unstressed positions.

It may be noticed that words which have strong and weak forms occur more often in unstressed than in stressed positions; consequently the weak forms of these words are of more frequent occurrence than their strong form. However, a weak form of a word is distinguished from its strong form by:

1. a difference of vowel-sound, or
2. the absence of a sound (vowel or consonant), or
3. a difference in the length of a vowel.

The following is a list of the most common English words that have weak forms. Examples showing the use of weak forms are given below the list.

Word	Strong Form	Weak Form(s)
a	[ei]	[ə]
am	[æm]	[əm]
		[m]
an	[æn]	[ən]
		[n]
and	[ænd]	[ənd]
		[ən]
		[nd]
		[n]
are	[ɑ:]	[ə]
		[ər] (before vowels]
as	[æz]	[əz]
at	[æt]	[ət]
be	[bi:]	[bi]
been	[bi:n]	[bin]
but	[bʌt]	[bət]
can	[kæn]	[kən]
		[kn], [kŋ] (less common)
do	[du:]	[du] (before vowels and w)
		[də] (before consonants)
		[d] (before unstressed you)
does	[dʌz]	[dəz]
for	[fɔ:]	[fə]
		[fər], [fr] (before vowels)
from	[frɔm]	[frəm]
had	[hæd]	[həd]
		[əd] (not initially)
		[d] (only after a vowel)
has	[hæz]	[həz]
		[əz] (not initially)
		[z] (after a voiced sound)
		[s] (after a voiceless sound)

Word	Strong Form	Weak Form(s)
have	[hæv]	[həv]
		[əv] (not initially)
		[v] (only after a vowel)
he	[hi:]	[i:] (not initially)
her	[hə:]	[ə:] (not initially)
		[hə]
		[ə] (only finally)
		[ə:r], [ər] (before vowels)
him	[him]	[im] (not initially)
his	[hiz]	[iz] (not initially)
is	[iz]	[z] (after a voiced sound)
		[s] (after a voiceless sound)
me	[mi:]	[mi]
must	[mʌst]	[məst]
		[məs]
not	[nɔt]	[nt]
		[n]
of	[ɔv]	[əv]
		[ə] (less common)
or	[ɔ:]	[ə] (only before a consonant)
		[ər] (before a vowel)
Saint	[seint]	[sənt], [snt]
		[sən], [sn]
shall	[ʃæl]	[ʃəl], [ʃl]
		[ʃ] (less common)
should	[ʃud]	[ʃəd]
		[ʃd]
sir	[sə:]	[sə]
		[sər] (before vowels)
some	[sʌm]	[səm]
		[sm]

Word	Strong Form	Weak Form(s)
than	[ðæn]	[ðən]
		[ðn]
that	[ðæt]	[ðət]
the	[ði:]	[ði] (before vowels)
		[ðə] (before consonants)
them	[ðem]	[ðəm]
		[ðm]
there	[ðɛə]	[ðə]
		[ðər] (before vowels)
till	[til]	[tl]
to	[tu:]	[tu] (before vowels, w and finally)
		[tə] (before consonants)
us	[ʌs]	[əs]
		[s] (in Let's)
was	[wɔz]	[wəz]
were	[wə:]	[wə]
		[wər] (before vowels)
will	[wil]	[l] (not initially)
would	[wud]	[əd] (not initially)
		[d] (only after vowels)
you	[ju:]	[ju]

Examples :

in a minute ['in ə 'minit]

I'm coming [ai m 'kʌmiŋ]

an egg [ən 'eg]

bread and butter ['bred n 'bʌtə]

the boys are here [ðə 'bɔiz ə 'hiə]

it is as well [it s əz 'wel]

at home [ət 'houm]
I ought to be going [ai 'ɔ:t tə bi 'gouiŋ]
he has been out [hi: z bin 'aut]
tired but successful ['taiəd bət sək'sesfl]
we can get it [wi: kŋ 'get it]
so do they ['sou də 'ðei]
What does it matter? ['wɔt dəz it 'mætə]
out for a walk ['aut fər ə 'wɔ:k]
a long way from the city [ə 'lɔŋ 'wei frəm ðə 'siti]
the train had left [ðə 'trein əd 'left]
he has arrived today [hi: z ə'raivd tə'dei]
I have bought a house [ai v 'bɔ:t ə 'haus]
but he said he would [bət i: 'sed i: 'wud]
he paid her a visit [hi: 'peid ə:r ə 'vizit]
Give him his coat ['giv im iz 'kout]
he's never there [hi: z 'nevə 'ðɛə]
Could you tell me the time? ['kud ju: 'tel mi ðə 'taim]
I must go now [ai məs 'gou 'nau]
it does not matter [it 'dʌz n 'mætə]
first of all ['fə:st əv 'ɔ:l]
one or two others ['wʌn ə tu: 'ʌðəz]
St. Paul's [sn 'pɔ:lz]
Shall I come with you? [ʃəl 'ai kʌm 'wið ju:]
I should have thought so [ai ʃəd əv 'θɔ:t sou]
Sir John [sə 'dʒɔn]
some paper [səm 'peipə]
more than that ['mɔ: ðən 'ðæt]
I found that I was wrong [ai 'faund ðət ai wəz 'rɔŋ]

the other day [ði 'ʌðə 'dei]
Take them away ['teik ðəm ə'wei]
there wasn't one [ðə 'wɔz nt wʌn]
I'm staying till Tuesday [ai m 'steiiŋ tl 'tju:zdi]
I want to ask you [ai 'wɔnt tu 'ɑ:sk ju]
Give us one ['giv əs wʌn]
he was right [hi: wəz 'rait]
they were very tired [ðei wə 'veri 'taiəd]
that will do ['ðæt l 'du:]
it would be a pity [it əd bi ə 'piti]
I would like to see you [ai d 'laik tə 'si: ju]

8. THE CLASSIFICATION OF CONSONANTS

It has been stated in Section 4 that a consonant is distinguished from a vowel by an obstruction of a certain type to the air passage. This obstruction is sometimes caused by one, and sometimes by another, of the speech organs. This may also lead either to a complete closure of the passage or to a partial one. Consonants may be classified according to :

1. The place or places of the obstruction.
2. The nature of the obstruction, i.e. whether the air passage is fully or partly closed.

The following classes of consonants may be distinguished according to the place(s) of obstruction :

a. Bilabial : These are articulated by the two lips, e.g. [m], [w], [b].
b. Labio - dental : These are articulated by the lower lip against the upper teeth, e.g [f], [v].
c. Dental: articulated by the tip of the tongue against the upper teeth, e.g. [θ], [ð].
d. Alveolar: articulated by the tip or blade of the tongue against the teeth-ridge, e.g. [t].

e. Post-alveolar: articulated by the tip of the tongue against the back part of the teeth-ridge, e.g. [r].

f. Palato-alveolar: articulated by the blade of the tongue against the teeth-ridge, the main body of the tongue being raised simultaneously in the direction of the palate, e.g. [ʃ], [ʒ].

g. Palatal: articulated by the front of the tongue against the hard palate, e.g. [j].

h. Velar : articulated by the back of the tongue against the soft palate, e.g. [k], [ŋ].

i. Glottal : articulated in the glottis (the space between the vocal cords), e.g. English [h], and the glottal stop [ʔ] in Egyptian Arabic.

The following classes of consonants may be distinguished according to the nature of the obstruction :

a. Plosive : These are formed as a result of complete blockage or closure of the air passage; the air is compressed, then the closure is suddenly released making an explosive sound called 'plosion', e.g. [p], [b], [d].

b. Nasal : These are formed by a complete closure in the mouth; the soft palate is lowered so that the air is free to issue through the nose, e.g. [m], [n].

c. Lateral : formed by an obstacle in the centre of the air passage in the mouth, but the air

is free to pass on one or both sides of the obstacle, e.g. [l].

d. Rolled : formed by a rapid series of taps of some elastic organ in the mouth, e.g. rolled [r]. There are no rolled consonants in English.

e. Flapped: formed by a single tap of some elastic organ in the mouth, e.g. flapped [r] common in Egyptian Colloquial Arabic.

f. Fricative: formed by narrowing the air passage to such an extent that the air in forcing its way through the obstruction produces audible friction, e.g. [f], [s], [z].

g. Affricate: a kind of plosive in which the release of the closure is immediately followed by a fricative sound formed at the same place of articulation in the mouth, e.g. [tʃ], [dʒ].

h. Semi-Vowel : a voiced gliding sound in which the speech organs move from the position of a close vowel to that of another more prominent vowel, e.g. [j], [w].

The following table shows English consonants in accordance with the above classification :

	Labial		Dental	Alveolar	Post-alveolar	Palato-alveolar	Palatal	Velar	Glottal
	Bilabial	Labio-dental							
Plosive	p b			t d				k g	
Nasal	m			n				ŋ	
Lateral				l					
Fricative		f v	θ ð	s z	r	ʃ ʒ			h
Affricate						tʃ dʒ			
Semi-Vowel	w						j		

Table of English Consonants

9. THE ENGLISH CONSONANTS

i. PLOSIVE CONSONANTS

Description of English [p]

1. The air passage is fully obstructed by closing the lips and raising the soft palate.
2. When the lips are opened, the air suddenly escapes from the mouth producing an explosive sound.
3. The vocal cords are not in vibration.
4. This sound may be termed as a 'voiceless bilabial plosive'.

Spellings of [p]

This sound is regularly spelt p, but it may be noted that:

1. The letter p is not pronounced in initial ps- and pn- as in, e.g. psalm [sɑ:m]; pneumonia [nju'mounjə]; pneumatic [nju'mætik]; and in the individual words cupboard ['kʌbəd] and receipt [ri'si:t]
2. When the consonant [p] is followed by a stressed vowel it is pronounced with considerable force and with aspiration, i.e. with a

noticeable puff of breath, e.g. pardon ['pɑ:dn]; payment ['peimənt]; part [pɑ:t]; but the aspiration is not so strongly marked when [p] is preceded by [s], e.g. spark [spɑ:k]; spin [spin]; spell [spel]; sport [spɔ:t].

English Consonant [b]

This consonant is formed like English [p] except that the breath force is weaker and the vocal cords are made to vibrate. The sound may consequently be termed as a ' voiced bilabial plosive '.

Spellings of [b]

This sound is usually spelt b, e.g.
baby [beibi]; boy [bɔi].

The letter b is unpronounced when final and preceded by m, e.g.
comb [koum]; lamb [læm]; it is also unpronounced when followed by t in a few words, e.g. debt [det]; doubt [daut]; subtle ['sʌtl].

English [t]

1. The air passage is fully closed by raising the soft palate and raising the tip of the tongue to touch the teeth-ridge.

2. When the tongue is removed from the teeth-ridge the air suddenly escapes from the mouth causing an explosive sound.

3. The vocal cords are not in vibration.
4. This sound may be termed a 'voiceless alveolar plosive'.

Spellings of [t]

[t] is regularly spelt t, but this letter is silent in words ending in - stle and - sten, e.g.

castle ['kɑ:sl] ; listen [lisn] ; hasten ['heisn].
It is also silent in words like Christmas ['krisməs] and waistcoat ['weiskout].

[t] represents also the spelling - ed in the inflected forms of verbs ending in a voiceless consonant (except t), e.g.

walked [wɔ:kt] ; asked [ɑ:skt] ; finished ['finiʃt] ; passed [pɑ:st]; but notice, e.g. expected [iks'pektid]; parted ['pɑ:tid].

Exceptional words are :

eighth [eitθ]; Thames [temz]; Thomas ['tɔməs].
It may be noticed that when [t] is followed by a vowel in a stressed syllable, it is aspirated, e.g.

table [teibl], talkative ['ɔ:kətiv] ; telephone ['telifoun]. The aspiration is less marked in unstressed positions or when [t] is preceded by s, e.g.

better ['betə] ; quality ['kwɔliti] ; stem [stem] ; stop [stɔp).

English [d]

This consonant is formed like English [t] except that the breath force is weaker and the vocal cords

are in vibration. The sound may be termed 'a voiced alveolar plosive'.

Spellings of [d]

[d] is regularly spelt d, e.g.

deed [di:d]; dark [dɑ:k].

[d] represents also the final -ed of the past tenses and past participles of verbs ending in a vowel sound or a voiced consonant (except d), e.g.

answered ['ɑ:nsəd] ; played [pleid] ; opened ['oupənd]; warned [wɔ:nd]; seized [si:zd]; begged [begd].

English [k]

1. The air passage is completely closed by raising the soft palate and raising the back of the tongue to touch the soft palate.
2. When the tongue is lowered and the contact of the tongue with the palate is released, the air suddenly escapes through the mouth with an explosive sound.
3. The vocal cords are not in vibration.
4. This sound may be termed a 'voiceless velar plosive'.

Spellings of [k]

[k] is regularly spelt k, e.g.

keep [ki:p]; kind [kaind]; kite [kait].

[k] represents also the letter c when followed by one

of the letters a, o, u or by a consonant letter or when final, e.g.

cat [kæt]; coat [kout]; cut [kʌt]; fact [fækt]; pact [pækt]; mechanic [mi'kænik].

[k] stands for the letters ch in some words, e.g.

character ['kæriktə]; chemist ['kemist]; Christmas ['krisməs]; ache [eik]; stomach ['stʌmək].

The letters qu are generally pronounced [kw], e.g.

queen [kwi:n]; quarter ['kwɔ:tə]; squander ['skwɔn-də]; antiquity [æn'tikwiti]; but the letters qu are pronounced [k] only in a few words, e.g.

conquer ['kɔŋkə]; liquor ['likə]; antique [æn'ti:k].

Like [p] and [t], the sound [k] has considerable aspiration before a strongly stressed vowel, e.g.

cut [kʌt]; come [kʌm]; whereas an unstressed [k] with the same tongue position or [k] preceded by an s or before another plosive (in medial and final consonant clusters) has less marked aspiration, e.g.

maker ['meikə]; sky [skai]; act [ækt].

English [g]

[g] is formed like English [k] except that the breath force is weaker and the vocal cords are made to vibrate. This consonant is termed a 'voiced velar plosive'.

Spellings of [g]

[g] is the regular sound of the letter g when fol-

lowed by one of the letters a, o, u, or by a consonant or when final, e.g.

game [geim]; go [gou]; guard [gɑ:d]; gum [gʌm]; grass [grɑ:s]; green [gri:n]; log [lɔg]; dig [dig].

[g] represents also the spellings ge and gi in some words, e.g.

get [get]; give [giv]; girl [gə:l]; finger ['fiŋgə].

It may be noted that the letter x in the prefix ex- is generally pronounced [gz] when followed immediately by a stressed or partially stressed vowel (with the exception of words with initial exc-), e.g.

exact [ig'zækt]; examine [ig'zæmin]; examination [igˌzæmi'neiʃn]; exhaust [ig'zɔ:st]; exhibit [ig'zibit]; but notice, e.g. except [ik'sept]; excite [ik'sait]; excess [ik'ses].

ii. NASAL CONSONANTS

There are three nasal consonants in English. They are [m], [n] and [ŋ].

English [m]

1. The air passage is fully blocked by closing the lips.
2. The soft palate is lowered so that the air can pass through the nose.
3. The tongue is in a neutral position, and the vocal cords vibrate.
4. The sound may thus be defined as a 'voiced bilabial nasal'.

Spellings of [m]

[m] is regularly spelt m, e.g.

mark [mɑ:k]; dam [dæm].

The letter m is unpronounced in initial mn-, e.g.

mnemonic [ni(:)'mɔnik].

English [n]

1. The air passage is fully blocked by raising the tip of the tongue to touch the teeth-ridge.
2. The soft palate is lowered so that the air can pass through the nose.
3. The vocal cords are in vibration.
4. This sound may therefore be defined as a 'voiced alveolar nasal'.

Spellings of [n]

[n] is the usual sound of the letter n, e.g.

neat [ni:t]; man [mæn]; fun [fʌn].

The letter n is unpronounced when following m at the end of a word, e.g.

column ['kɔləm]; damn [dæm]; condemn [kən'dem], autumn ['ɔ:təm]; solemn ['sɔləm]; hymn [him].

[n] sometimes represents the letters gn in several words, e.g.

campaign [kæm'pein]; reign [rein]; foreign ['fɔrin]; gnaw [nɔ:]; gnarl [nɑ:l].

English [ŋ]

1. The air passage is completely blocked by rais-

ing the back of the tongue to touch the soft palate.

2. The soft palate is lowered so that the air can pass through the nose.
3. The vocal cords vibrate.
4. This sound may be termed a 'voiced velar nasal'.

Spellings of [ŋ]

[ŋ] is the regular sound of the letters ng in final position, e.g. king [kiŋ]; hang [hæŋ].

The letters ng in medial position are pronounced:

a. [ŋ] in words formed from verbs and nouns ending in -ng, e.g.
singer ['siŋə]; ringing [riŋiŋ]; brings [briŋz]; bringing ['briŋiŋ]; belonging [bi'lɔŋiŋ]; hanged ['hæŋd]; things [θiŋz].

b. [ŋg] in words formed from adjectives ending in -ng, e.g.
stronger [strɔŋgə]; strongest [strɔŋgist]; younger [jʌŋgə]; youngest [jʌŋgist]; longer [lɔŋgə].

[ŋ] also represents the combination -ngue in final position, e.g.

tongue [tʌŋ]; harangue [hə'ræŋ].

It may also be noticed that the prefixes en- and in- followed by g may be pronounced either with [n] or [ŋ], e.g.

engage [in'geidʒ] or [iŋ'geidʒ]; ingredient

[in'gri:djənt] or [iŋ'gri:djənt]; (but notice the pronunciation of the prefix-un followed by g in, e.g. ungrateful [ʌn'greitf(u)l]; ungainly [ʌn'geinli], etc.)

[ŋ] stands also for n before letters representing [k], e.g.

ink [iŋk]; anchor ['æŋkə]; thank [θæŋk]; think [θiŋk].

iii. LATERAL CONSONANTS

There are two variant pronunciations (allophones) of the phoneme [l] in English. They are known as 'clear'[l] and 'dark' [l]. Clear [l] occurs only before vowels and before [j], e.g.

leave [li:v]; late [leit]; long [lɔŋ]; million ['miljən].

Dark [l] is used only before all other consonants and in final position, e.g.

killed [kild]; help [help]; twelve [twelv]; feel [fi:l]; well [wel]; people ['pi:pl].

Description of [l]

1. For both clear [l] and dark [l] the tip of the tongue touches the teeth-ridge. There is a full closure in the centre of the mouth, but the air is able to escape on one or both sides of the tongue.
2. The soft palate is raised, and the vocal cords are in vibration.

3. These sounds may be termed 'voiced alveolar lateral' consonants.

Spellings of [l]

[l] is regularly spelt l.

The letter l is unpronounced in a number of words, usually in the combinations al, ol before f, v, k, m, e.g.

calf [kɑ:f]; half [hɑ:f]; halve [hɑ:v]; calves [kɑ:vz]; chalk [tʃɔ:k]; talk [tɔ:k]; walk [wɔ:k]; folk [fouk]; calm [kɑ:m]; palm [pɑ:m]; psalm [sɑ:m]; salmon ['sæmən].

[l] is also unpronounced in the word colonel ['kə:nl]. It is also silent in the special finites could [kud]; should [ʃud] and would [wud] (in their strong form).

iv. FRICATIVE CONSONANTS

There are ten fricative consonants in English. These are [f], [v], [θ], [ð], [s], [z], [ʃ], [ʒ], [r], [h].

English [f]

1. This sound is formed by placing the lower lip against the upper teeth. When the air forces its way between them, a fricative noise is heard.
2. The soft palate is raised, and the vocal cords are not in vibration.

3. The sound may be defined as a 'voiceless labio-dental fricative'.

Spellings of [f]

[f] is regularly spelt f, e.g.
fence [fens]; fire [faiə]; far [fɑ:]; off [ɔf].

[f] usually represents the letters ph, e.g.
philosophy [fi'lɔsəfi]; phonology [fou'nɔlədʒi]; photograph ['foutəgrɑ:f].

[f] stands for the letters gh only in a few words, e.g.
cough [kɔf]; enough [i'nʌf]; rough [rʌf]; laugh [lɑ:f]; draught [drɑ:ft].

Notice also the pronunciation of the word lieutenant [lef'tenənt].

English [v]

This sound is formed at the same place of articulation and in the same manner as [f] except that the vocal cords are in vibration. The sound is thus termed a 'voiced labio-dental fricative'.

Spellings of [v]

[v] is regularly spelt v, e.g.
vast [vɑ:st]; vain [vein]; live [liv].

[v] represents also the letters ph in the individual words nephew ['nevju:] (also pronounced ['nefju:]) and Stephen ['sti:vn].

Notice that the letter f is pronounced [v] in the word of [ɔv] (and the weak form [əv]).

English [θ]

1. This sound is formed by placing the tip of the tongue close to the upper teeth. The air passes through the narrowing formed in this way.
2. The soft palate is raised, and the vocal cords do not vibrate.
3. The sound may be termed a 'voiceless dental fricative'.

Spellings of [θ]

[θ] is usually spelt th when initial in the word with the exception of pronouns and similar words, e.g.

think [θiŋk]; thin [θin] ..etc., but notice the pronunciation of that [ðæt]; these [ði:z]; there [ðεə] ..etc.

[θ] represents also the letters th when medial in the word, e.g.

author ['ɔ:θə]; cathedral [kə'θi:drəl]; method ['meəθd].

There are exceptions which are mentioned under the spellings of [ð].

[θ] stands also for th in final position, e.g.

path [pɑ:θ]; teeth [ti:θ]; north [nɔ:θ]; youth [ju:θ].

There are exceptions mentioned under the spellings of [ð].

We may notice that some nouns ending in [θ] form their plurals in [ðz], e.g.

baths [bɑ:ðz]; mouths [mauðz]; oaths [ouðz];
paths [pɑ:ðz]; truths [tru:ðz]; youths [ju:ðz].

English [ð]

[ð] is formed at the same place and in the same manner of articulation as [θ], but the vocal cords are in vibration. The sound is thus defined as a 'voiced dental fricative'.

Spellings of [ð]

[ð] is spelt th in the definite article, in pronouns, pronominal adverbs, and the conjunctions than [ðæn], though [ðou], although [ɔ:l'ðou], e.g.

they [ðei]; them [ðem]; that [ðæt]; those [ðouz];
then [ðen]; there [ðɛə]; thus [ðʌs].

[ð] is sometimes spelt th in medial position, e.g.

gather ['gæðə]; mother ['mʌðə]; wither ['wiðə];
bother ['bɔðə].

[ð] may also be spelt th in final position, especially when th precedes a final silent e, e.g.

booth [bu:ð]; smooth [smu:ð]; mouth [mauð] (v.);
breathe [bri:ð]; bathe [beið]; loathe [louð]; clothe
[klouð]; soothe [su:ð].

English [s]

1. This sound is formed between the blade of the tongue and the teeth-ridge. The air passage is very narrow at the point of articulation.
2. The soft palate is raised, and the vocal cords do not vibrate.

3. This sound may be termed a 'voiceless blade-alveolar fricative'.

Spellings of [s]

[s] is the usual sound of the letter s in initial position, e.g.

stand [stænd]; sort [sɔ:t]; (but notice the exceptional words sugar ['ʃugə] and sure [ʃuə] and their derivatives).

[s] usually stands for the letter c when followed by e, i or y, e.g.

cellar ['selə]; place [pleis]; civil ['sivl]; policy ['pɔlisi]; cycle ['saikl].

The letter s is not pronounced in the following words, most of which are of French origin :

aisle [ail]; island ['ailənd]; chassis ['ʃæsi]; corps [kɔ:]; debris ['debri:]; précis ['preisi:]; viscount ['vaikaunt].

Since there are few rules concerning the distribution of the sounds [s] and [z] in words written with s, we would better learn the pronunciation of s in each individual word from a pronouncing dictionary.

English [z]

[z] is formed at the same place and in the same manner of articulation as [s], but the vocal cords are in vibration. This sound is thus described as a 'voiced blade-alveolar fricative'.

Spellings of [z]

[z] is the regular pronunciation of the letter z whether in initial, medial or final position, e.g.

zero ['ziərou]; zone [zoun]; lazy ['leizi]; dozen ['dʌzn]; freeze [fri:z]; doze [douz].

[z] represents also the letter s in final position only in a few words, e.g.

as [æz]; has [hæz]; Mrs ['misiz]; lens [lenz]; James [dʒeimz]; Thames [temz]; axes ['æksi:z]; crises ['kraisi:z].

[z] stands also for the spelling ss in the following individual words:

dessert [di'zə:t]; dissolve [di'zɔlv]; possess [pə'zes]; scissors ['sizəz]; hussar [hu'zɑ:].

[z] is spelt s in the inflected forms of nouns and verbs when s follows a vowel or a voiced consonant (except [z], [ʒ], [dʒ]), e.g.

prays [preiz]; opens ['oupənz]; days [deiz]; birds [bə:dz]; but notice the pronunciation of, e.g. raises ['reiziz]; garages ['gærɑ:ʒiz]; judges ['dʒʌdʒiz].

Notice that the s of the singular noun house [haus] is pronounced [z] in the plurai, i.e. ['hauziz].

English [ʃ]

1. This sound is formed between the tip and blade of the tongue and the back part of the teeth-ridge. The main body of the tongue is raised simultaneously towards the hard palate.

The air passage at the place of articulation is a little wider than for [s].

2. The soft palate is raised, and the vocal cords are not in vibration.
3. There is a very small distance between the teeth, and the lips are protruded.
4. This sound may be termed a 'voiceless palato-alveolar fricative'.

Spellings of [ʃ]

[ʃ] is regularly spelt sh whether in initial, medial or final position, e.g.

short [ʃɔ:t]; shine [ʃain]; bishop ['biʃəp]; fashion ['fæʃən]; cash [kæʃ]; fish [fiʃ].

[ʃ] represents also the spellings ci, si, ssi, sci, ti in medial position when followed by a weakly stresssed syllable, e. g.

special ['speʃəl] ; pension ['penʃən] ; transmission [trænz'miʃən] ; conscious ['kɔnʃəs] ; nation ['neiʃən] ; patience ['peiʃəns].

[ʃ] stands also for the letters ch mainly in words recently borrowed from French, e.g.

chagrin ['ʃægrin] ; champagne [ʃæm'pein] ; chassis ['ʃæsi] ; cliché ['kli:ʃei] ; crochet ['krouʃei] ; moustache [məs'tɑ:ʃ].

English [ʒ]

[ʒ] is formed in the same place and in the same manner of articulation like [ʃ], but the vocal cords are

in vibration. The sound may thus be termed a 'voiced palato-alveolar fricative'.

Spellings of [ʒ]

[ʒ] is the usual sound of the letters -sure when weakly stressed, e.g.

measure ['meʒə] ; treasure ['treʒə] ; leisurə ['leʒə].

[ʒ] represents also the spelling si in weakly stressed combination sion, e.g.

protrusion [prə'tru:ʒən] ; confusion [kən'fju:ʒn] ; collision [kə'liʒən] ; vision ['viʒn].

[ʒ] stands also for the letters ge in words recently borrowed from French, e.g.

barrage ['bærɑ:ʒ] ; mirage ['mirɑ:ʒ] ; camouflage ['kæmuflɑ:ʒ]; espionage [ˌespiə'nɑ:ʒ]; rouge [ru:ʒ]; bourgeois ['buəʒwɑ:].

Notice also the pronunciation of the following words:

transition [træn'siʒn] or [træn'ziʃn]; seizure ['si:ʒə]; usual ['ju:ʒuəl] or ['ju:ʒl].

English [r]

1. [r] is formed between the tip of the tongue and the back part of the teeth-ridge. The air passes at this point causing audible friction.
2. The air passage is wider at the point of articulation than it is for [ʒ]. The distance between the jaws is wide apart, and the lips are a little rounded.
3. The soft palate is raised, and the vocal cords are in vibration.

4. The sound may be termed a 'voiced post-alveolar fricative'.

Spellings of [r]

The letter r is pronounced [r] only when followed by a vowel, e.g.

raise [reiz]; thread [θred]; bury ['beri].

The letter r is not pronounced in Received Pronunciation when it occurs finally or before another consonant, e.g.

far [fɑ:]; fire [faiə]; tear [tiə]; farm [fɑ:m]; tyres ['taiəz]; hers [hə:z].

Notice the pronunciation of the word iron ['aiən]. This is the only word in British English in which the letter r is not pronounced before a vowel.

English [h]

1. The mouth is held in readiness for the vowel that is to follow immediately while the air passes through the glottis causing audible friction.
2. The soft palate is raised, and the vocal cords do not vibrate.
3. This sound is therefore described as a 'voiceless glottal fricative'.

Spellings of [h]

[h] is regularly spelt h, e.g.

heart [hɑ:t]; heat [hi:t]; horn [hɔ:n].

The letter h is unpronounced in initial position when followed by a strongly stressed vowel, e.g.

honest ['ɔnist]; honour ['ɔnə]; hour ['auə]; and their derivatives.

h is also usually unpronounced in weakly stressed syllables, e.g.

forehead ['fɔrid]; shephered ['ʃepəd]; vehement ['vi:əmənt]; Birmingham ['bə:miŋəm]; Durham ['dʌrəm]; Blenheim ['blenim].

Notice also the silent h in perhaps [præps] (in addition to [pə'hæps]).

[h] represents the letters wh in the following individual words:

who [hu:]; whom [hu:m]; whose [hu:z]; whole [houl]; whoop [hu:p].

v. AFFRICATE CONSONANTS

There are two affricate consonants in English: [tʃ] and [dʒ]. Each affricate is represented by a digraph.

English [tʃ]

1. The air passage is fully closed by raising the soft palate and raising the tip of the tongue to touch the back part of the alveolar ridge; the main part of the tongue is raised in the direction of the hard palate.
2. When the tongue is removed from the alveolar ridge the air escapes from the mouth; the

removal of the tongue is made in such a way that the sound of the fricative consonant [ʃ] is heard before any immediately following sound.

3. The lips are a little protruded, and the vocal cords are not in vibration.
4. The sound may be called a 'voiceless palato-alveolar affricate'.

Spellings of [tʃ]

[tʃ] is the usual sound of the spellings ch and tch, e.g. chain [tʃein]; church [tʃə:tʃ]; choose [tʃu:z]; watch [wɔtʃ]; matches ['mætʃiz].

[tʃ] is also the sound of the letter t in weakly stressed combination ture, e.g.

furniture ['fə:nitʃə]; literature ['litəritʃə]; capture ['kæptʃə]; nature ['neitʃə]; lecture ['lektʃə] (with the exception of aperture ['æpətjuə] and overture ['ouvətjuə]).

[tʃ] represents also the letters ti in combustion [kəm'bʌstʃən] and question ['kwestʃən].

[tʃ] stands also for the letters te in the single word righteous ['raitʃəs], but not in other words ending in -teous.

English [dʒ]

[dʒ] is formed in the same place and in the same manner of articulation as [tʃ], but the breath force is weaker and the vocal cords are in vibration.

This sound may thus be termed a 'voiced palato-alveolar affricate'.

Spellings of [dʒ]

[dʒ] is the normal pronunciation of j, e.g.

jam [dʒæm]; jewel ['dʒu:əl]; jet [dʒet].

[dʒ] is also the usual sound of the letter g when followed by e, i, y, for example

gem [dʒem]; general ['dʒenərəl]; gin [dʒin]; giant ['dʒaiənt]; religion [ri'lidʒən]; clergy ['klə:dʒi]; strategy ['strætidʒi].

[dʒ] represents also the letters dg which mainly occur after short stressed vowels in medial position or before a final silent e, e.g.

cudgel ['kʌdʒəl]; judgment ['dʒʌdʒmənt]; edge [edʒ]; bridge [bridʒ]; hedge [hedʒ].

Notice the pronunciation of the following individual words :

grandeur ['grændʒə]; soldier ['souldʒə]; procedure [prə'si:dʒə]; gaol [dʒeil]; Greenwich ['grinidʒ].

vi. SEMI-VOWELS

There are two semi-vowels in English. They are symbolized by [w] and [j].

English [w]

1. The speech organs begin almost in position for [u], i.e. the back of the tongue is raised in the direction of the soft palate, and the lips

are closely rounded; the tongue immediately glides from this position to that of some other vowel.

2. The soft palate is raised, and the vocal cords are made to vibrate.
3. This sound may be termed a 'labio-velar semi-vowel'.

Spellings of [w]

[w] is the usual sound of the letter w when it occurs at the beginning of a syllable or when it is preceded by a consonant, e.g.

wait [weit]; world [wəːld]; away [əˈwei]; twin [twin]; swell [swel].

But it may be noticed that the letter w is unpronounced in the combination wr as in, e.g.

write [rait] ; wrong [rɔŋ]; also in the words two [tuː]; answer [ˈɑːnsə]; sword [sɔːd].

[w] represents also the letter u when preceded by q, e.g.

queen [kwiːn]; quick [kwik]; conquest [ˈkɔŋkwest] ; liquid [ˈlikwid]; with the exception of conquer [ˈkɔŋkə]; etiquette [etiˈket]; exchequer [iksˈtʃekə]; liquor [ˈlikə]; bouquet [ˈbukei]; cheque [tʃek] and some other words.

[w] stands also for the letter u when preceded by g in weakly stressed syllables, e.g.

distinguish [disˈtiŋgwiʃ]; linguist [ˈliŋgwist]; lan-

guage ['læŋgwidʒ]; anguish ['æŋgwiʃ].

Notice also the pronunciation of the following individual words:

one [wʌn]; once [wʌns]; choir ['kwaiə]; suite [swi:t].

English [j]

1. The speech organs begin almost in position for [i], i.e. the front of the tongue is raised in the direction of the hard palate, and the lips are spread; the tongue immediately glides from this position to that of some other vowel.
2. The soft palate is raised, and the vocal cords are in vibration.
3. The sound may be called an 'unrounded palatal semi-vowel'.

Spellings of [j]

[j] is the usual sound of the letter y when it occurs at the beginning of a syllable, e.g.

yard [jɑ:d]; yellow ['jelou]; lawyer ['lɔ:jə].

[j] often represents the letters i and e when followed by the sound [ə], e.g.

familiar [fə'miljə]; opinion [ə'pinjən]; miscellaneous [ˌmisi'leinjəs].

[j] is sometimes inserted before the sound [u:] in words spelt with u, ue, ui, ew and eu, e.g.

unit ['ju:nit]; mule [mju:l]; due [dju:]; few [fju:]; queue [kju:]; but sometimes the [j] is not inserted as in, e.g.

rule [ru:l]; June [dʒu:n]; clue [klu:]; chew [tʃu:].

10. SOUNDS IN SEQUENCE

i. ELISION AND ASSIMILATION

It is noticeable that speech sounds are affected by other sounds adjacent to them in the phonetic sequence. Compare, for example, the articulation of [k] in card [kɑ:d], keep [ki:p] and call [kɔ:l]. The difference in the point of articulation of [k] in each case relates to difference in the nature of the following vowel. Thus, the [k] of [kɑ:d] is articulated farther back than that of [ki:p], and that of [kɔ:l] is articulated still further back. In the present section we are going to deal with certain phonetic features arising from the influence which sounds have upon other adjacent sounds in connected speech. Two of the most common features are elision and assimilation.

ELISION

Elision may be defined as the dropping or disappearance of a sound. There are two types of elision:

1. Historical elision which is the result of a historical process by which a sound that was pronounced in an earlier form of a word was omitted in a later pronunciation of the same word, e.g. [t] has been dropped in castle [ˈkɑ:sl]; [p] has been omitted in cupboard

['kʌbəd]; [d] has been dropped in windmill ['winmil] and kindness ['kainnis].

Historical elisions of unstressed vowels, especially [ə] and [i] are quite common in English, e.g. the words history and university are now pronounced ['histri] and [ju:ni'və:sti]. Another remarkable example of historical elision in English is the omission of all the [r] sounds when they occur finally and before other consonants in Received Pronunciation, e.g. more [mɔ:]; other [ʌðə]; arm [ɑ:m]; horse [hɔ:s]; church [tʃə:tʃ].. etc. (in which the [r]'s were presumably pronounced at an earlier time, as they still are in many varieties of English such as British Northern English and American English). The same applies to the dropping of [l] in a number of words like calm [kɑ:m] ; half [hɑ:f] as has been already stated.

2. Contextual elision in which a sound that is present in a word when uttered by itself is dropped in a compound or in a connected phrase. This type of elision is frequent in English, especially in rapid speech, e.g.
   a good deal [ə 'gu 'di:l]; blind man ['blain mæn]; take care ['tei 'kɛə]; last time ['lɑ:s 'taim].

ASSIMILATION

Assimilation is defined as the process by which a

sound is replaced by another sound under the influence of a third neighbouring sound. This may be called 'ordinary assimilation'. Sometimes, a sequence of two neighbouring sounds comes together and is replaced by a single new sound different from both the original sounds. This kind of change is called 'coalescent assimilation'.

Assimilation may be divided into two main types: historical and contextual.

Historical Assimilation :

This type takes place in the course of the historical development of a language. It is a process by which a word that was pronounced in a certain way came to be pronounced in a different way. For example, the change of m to n which the word ant [ænt] has undergone. This word was originally written amete and amte, and was pronounced ['æmətə] and later on ['æmtə] and [æmt]. This form changed at a later stage into the modern pronunciation [ænt]. This is an example of historical ordinary assimilation. An example of historical coalescent assimilation is the change that has taken place in the pronunciation of the word picture. In the earlier stages of the language this word was pronounced ['piktjur], later on the sequence [tj] was changed to the affricate [tʃ], hence its modern pronunciation ['piktʃə].

Contextual Assimilation :

Sometimes, when words are placed side by side in a compound or in a sentence, a word is pronounced with sounds different from those it has when pronounced in isolation. For example, the change of [s] to [ʃ] in the compound noun horseshoe [hɔ:ʃʃu:]; the change of [z] to [s] in newspaper ['nju:speipə]; the [v] to [f] in fivepence ['faifpəns]. Other examples of 'ordinary contextual assimilation' in connected speech are :

this shop ['ðiʃ ʃɔp]; does she ['dʌʒ ʃi:].

An example of 'contextual coalescent assimilation' is when don't [dount] and you [ju:] coalesce and form the pronunciation ['dountʃu].

On the other hand, another classification of assimilation is possible on the basis of whether the assimilated sound is influenced by a preceding or by a following sound. These two types are called Progressive and Regressive assimilation respectively. Thus, the change of [z] to [s] in It's ready [it s 'redi]; That's all ['ðæt s ɔ:l]; What's the time ['wɔt s ðə 'taim]; The shop's open [ðə 'ʃɔp s 'oupn] is progressive; whereas the assimilations that have occurred in ['hɔ:-ʃʃu:]; ['nju:speipə]; ['faifpəns] are of the regressive type.

It is noteworthy that assimilation in general occurs as the result of a linguistic tendency towards economy

of effort, since the process of assimilation usually produces some simplification in the movements performed by the organs of speech.

ii. LENGTH

The length or quantity of a sound is the length of time during which it is held on continuously in a given word or phrase. For practical purposes it is sufficient to distinguish two degrees of length: long and short.

Length of English Vowels :

The most important rule to notice about the length of English vowels is that 'long' vowels, i.e. [i:], [ɑ:], [ɔ:], [u:], [ə:], and diphthongs are shorter when followed by a voiceless consonant than when final or followed by a voiced consonant. Thus the vowel [i:] is shorter in seat [si:t] than it is in see [si:] or in seed [si:d]; the vowels in cart [kɑ:t], sauce [sɔ:s], loose [lu:s], nurse [nə:s] are shorter than those in car [kɑ:], saw [sɔ:], you [ju:], sir [sə:] or those in card [kɑ:d], saws [sɔ:z], lose [lu:z], furs [fə:z]; the diphthongs in face [feis], right [rait] are shorter than those in say [sei], try [trai] or those in pays [peiz], side [said].

This rule is also true if a nasal consonant or [l] intervenes between the vowel or diphthong and the voiceless consonant. Thus the [ə:] in burnt [bə:nt] is shorter than that in burn [bə:n] or that in burns

[bə:nz]; the [ou] in bolt [boult] is shorter than that in bowl [boul] or that in bold [bould].

Moreover, the 'long' vowels and diphthongs are shorter in weakly stressed syllables than in strongly stressed ones. Thus the [ɔ:] in record ['rekɔ:d] (n.) is shorter than the [ɔ:] in record [ri'kɔ:d] (v.). Likewise the [ɑ:] in carnation [kɑ:'neiʃn] is shorter than the same vowel in scarlet ['skɑ:lit]; the [ai] in idea [ai'diə] is shorter than the same diphthong in idle ['aidl]. Similarly in connected speech, the [ɔ:] in 'the same sort of thing' [ðə 'seim sɔ:t əv 'θiŋ] is shorter than its counterpart in 'the sort of thing' [ðə 'sɔ:t əv 'θiŋ].

Vowel-length and Rhythm :

Rhythm may be defined as the manner of recurrence of stressed syllables, and the alternation of stressed and unstressed syllables. In English there is a general rhythmic tendency to make strong stresses succeed one another in connected speech at approximately regular intervals of time, i.e. at nearly equal distances. Consequently, the length of vowels is affected by this rhythmic regularity : 'long' vowels and diphthongs in strongly stressed syllables are shorter when a weakly stressed syllable immediately follows in the same word. For instance, the [u:] in user ['ju:zə] is shorter than that in use [ju:z] (v.), and the [ə:] in burning ['bə:niŋ] is shorter than that in burn [bə:n]. In con-

nected speech the more intervening weakly stressed syllables, the shorter the vowel in the preceding strongly stressed syllable. Thus the [ou] in 'there's nobody there' [ðɛə z 'noubədi 'ðɛə] is not pronounced with the same length as the [ou] in 'there's no time' [ðɛə z 'nou 'taim], since the syllable [nou] in the second example takes up nearly as much time as the syllables [noubədi] in the first. Similarly, the [ə:] in 'I heard more' [ai 'hə:d 'mɔ:] is remarkably longer than the same vowel in 'I heard of it in the evening' [ai 'hə:d əv it in ði 'i:vniŋ].

Length of English Consonants:

Consonants in final position are usually longer when preceded by a 'short' vowel than when preceded by a 'long' vowel or diphthong. For example, the [n] in sin [sin] is longer than that in seen, scene [si:n] and sign [sain]. Likewise, the [l] in fill [fil] is longer than that in feel [fi:l] or that in pole [poul].

Secondly, the nasal consonants [m], [n], [ŋ] and the lateral consonant [l] are longer when followed by voiced consonants than when followed by voiceless consonants. For example, the [m] in number ['nʌmbə] is longer than that in jumper ['dʒʌmpə], and the [l] in cold [kould] is longer than that in fault [fɔ:lt].

Finally, plosive consonants are rather long when preceded by a short stressed vowel and followed by another consonant, e.g. the [k] in sect [sekt], pact [pækt] and factor ['fæktə]; the [p] in transcription [træns'kripʃn].

11. STRESS

Stress is defined as the degree of breath force with which a sound or syllable is uttered. In general, a sound or a syllable that is felt to be important by the speaker is uttered with considerable energetic action on the part of the organs of speech, in addition to strong force of exhalation. In this way the sound or syllable concerned is given greater 'prominence' than its neighbouring sounds or syllables, i.e. it is made to stand out to the ear above its neighbours. On the contrary, when relatively little energy is spent upon a given sound or syllable we feel that it is less prominent than its neighbours. Stress, however, is not the same thing as prominence, but it is one of the important factors that contribute to prominence. Pitch [1], length and intonation are also important elements. The term stress, as here defined, refers only to the degree of force of utterance.

Although we may distinguish various degrees of stress in English, it is possible, for practical linguistic

1) Pitch is 'the degree of acuteness or gravity of a tone, produced by the tension and rate of vibration of the vocal cords.' See Kingdon, R., *The Groundwork of English Intonation*, Longmans, London, third impression, 1966, p. xxii. See also Gimson, A.C., *An Introduction to the Pronunciation of English,* Edward Arnold, London, second edition, 1970, pp. 22-23.

purposes, to distinguish only three degrees of stress in ordinary unemphatic speech. Syllables which are pronounced with a greater degree of stress than the neighbouring syllables in a word or a sentence are said to be strongly or fully stressed or, more accurately, pronounced with *strong stress*. Syllables pronounced with a relatively small degree of breath force are termed unstressed or, more accurately, pronounced with *weak stress*, whereas syllables pronounced with an intermediate degree of force are said to be partially stressed or pronounced with *secondary stress*. For instance, in the word examination [igˌzæmi'neiʃən] the syllable [-nei-] bears a full stress, the syllable [-zæ-] bears a secondary stress, while the remaining syllables bear a lesser degree than either strong or secondary, i.e. a weak stress. A strong stress is shown by the sign ' placed immediately before the relevant syllable, a secondary stress is indicated by the sign ˌ placed immediately before the syllable, and a weak stress is left unmarked. For purposes of emphasis we may use the sign " placed before the pertinent syllable to indicate additional stress.

Two types of stress may be distinguished in English: *Word Stress* and *Sentence Stress*. Word stress is the relative degree of force used in pronouncing the different syllables of a word of more than one syllable. Words which consist of one syllable (i.e. monosyllabic words) cannot be said to have word stress. Sentence

stress is the relative degree of force given to the different words in a sentence. This latter type of stress is closely connected with intonation. Sentence stress, however, may differ from word stress in either of two ways: words of one syllable may receive sentence stress if they play a relatively important part in the utterance, and words of more than one syllable may be weakly stressed if their function in the sentence is relatively unimportant, e.g. in a sentence like 'This is a free country' [ðis iz ə 'fri: kʌntri], the word 'free' is strongly stressed, whereas 'country' is weakly stressed.

Word Stress :

Since there is no one fixed place for strong stress in English words it is difficult to formulate any rules in this respect. It is therefore advisable for the student of English to learn the place of the stress of each word from a phonetic pronouncing dictionary such as D. Jones's *English Pronouncing Dictionary*. The following examples show the unpredictable nature of word stress in English :

1. Words of two syllables may bear strong stress on the first syllable as in father ['fɑ:ðə], better ['betə], finish ['finiʃ]; on the second syllable as in believe [bi'li:v], rely [ri'lai]; or on both syllables as in inborn ['in'bɔ:n], unknown ['ʌn'noun], sixteen ['siks'ti:n], conversely ['kɔn'və:sli], misprint ['mis'print].

It may be noticed that words bearing two strong stresses may drop one of them when preceded or followed by another stressed syllable, in accordance with the principle of rhythmic regularity. For example, the word 'sixteen' said in isolation has two stresses, but in 'just sixteen' ['dʒʌst siks'ti:n] it bears the stress on the second syllable, whereas in 'sixteen chapters' ['siksti:n 'tʃæptəz] it is stressed on the first syllable; similarly in 'an unknown person' [ən 'ʌnnoun 'pə:sn] and 'quite unknown' ['kwait ʌn'noun].

2. Words of three syllables may have the strong stress on the first as in relishing ['reliʃiŋ]; on the second as in [di'si:və]; or on the third as in undermine [ˌʌndə'main] and photographic [ˌfoutə'græfik].

3. Words of four or more syllables have their strong stress, in the vast majority of cases, on the penultimate (i.e. the last syllable but one) as in compensation [ˌkɔmpen'seiʃən], communication [kəˌmju:ni'keiʃən]; or on the antepenultimate (i.e. the last syllable but two) as in regularity [ˌregju'læriti], imperceptible [ˌimpə'septəbl].

4. Compound words[1] usually bear strong stress on the first element only, e.g.

[1] A compound word is defined here as a word consisting of two words conventionally written as one word, with or without a hyphen.

dining-room [dainiŋrum] ; daybreak ['deibreik] ; bookbinding ['bukbaindiŋ]; schoolmaster ['sku:l-ma stə].

But some compounds have the stress on both elements as in, e.g.

armchair ['a:mtʃɛə]; good-looking ['gud'lukiŋ]; bad-tempered ['bæd 'tempəd]; first-class ['fə:st'kla:s]; home-made ['houm'meid].

A small number of compounds bear strong stress on the second element only. These include :

a. compounds with - ever, e.g. whenever [wen'evə].

b. compounds with - self, e.g. himself [him'self]; themselves [ðəm'selvz].

c. the following individual words :
hereafter [hiər'a:ftə]; thereafter [ðɛər'a:ftə] ; throughout [θru'aut]; wherein [wɛər'in]; al-ready [ɔ:l'redi] ; look-out [luk'aut]; uphold [ʌp'hould] ; shortcomings [ʃɔ:t'kʌmiŋz].

Sentence Stress :

In connected speech words that are felt to be of importance bear strong stress. Important words of one syllable may also bear strong stress, whereas relatively unimportant words are weakly stressed. Generally spea-king, unless there is special emphasis or contrast in the sentence, nouns, adjectives, demonstrative pronouns, interrogatives, principal verbs, and adverbs are the

most important words. Such words are therefore generally strongly stressed, but there are exceptional cases. Indeed no satisfactory and comprehensive rules can be given in the majority of cases. English sentence stress can best be learnt through the study of and loud reading from phonetically transcribed texts. However, the following remarks may be of help to the learner:

1. In expressions containing one word qualifying another, both words receive strong stress, e.g.
   It's very interesting [it s 'veri 'intristiŋ]; a useless attempt [ə 'ju:slis ə'tempt]; last evening ['lɑ:st 'i:vniŋ]; Hyde Park ['haid 'pɑ:k].
   The word 'street' is an exception to this rule. It does not receive strong stress in the names of streets, e.g.
   Downing street ['dauniŋ stri:t]; Oxford street ['ɔksfəd stri:t].

2. In phrasal verbs consisting of a verb + an adverbial particle, both elements usually bear strong stress, e.g.
   set up ['set 'ʌp]; look after ['luk 'ɑ:ftə]; go on ['gou 'ɔn]; switch off ['switʃ 'ɔf].
   The same is true with phrases like take care ['teik 'kɛə]; make haste ['meik 'heist]; get ready ['get 'redi].
   According to rhythmic variation, one of the two elements may lose its strong stress, e.g.

I went on [ai 'went 'ɔn]; but I can't go on [ai 'kɑ:nt gou 'ɔn], go on trying ['gou ɔn 'traiiŋ].

3. Prepositions occurring in final position in the sentence are generally weakly stressed, although they retain their strong form, e.g.
   What is he waiting for? ['wɔt s i: 'weitiŋ fɔ:];
   Where have you got it from? ['wεər əv ju: 'gɔt it frɔm].

4. When one wants to 'emphasize' a word for purposes of contrast, the surrounding words which would normally bear strong stress may be weakly stressed. Compare, for example, the following two sentences :
   We saw Sami walking [wi: 'sɔ: 'sæmi 'wɔ:kiŋ] (mere statement of fact), and [wi: sɔ: 'sæmi wɔ:kiŋ] (i.e. but we didn't see Fahmi, for example.)

   Again, in the sentence: I don't object ['ai dount əb'dʒekt] the pronoun 'I' is stressed (implying that someone else is objecting), therefore 'don't' has lost its strong stress.

12. INTONATION

Intonation may be defined as the variations or changes which take place in the pitch of the voice in connected speech. Change in pitch is due to differing rates of vibration of the vocal cords. As the rapidity in vibration of the vocal cords increases the pitch becomes high, and as the rapidity decreases the pitch becomes low. A study of the intonation of a spoken language makes it necessary to study the interrelation between the intonation patterns native speakers actually use and the grammatical and situational contexts in which they are used.

The important elements of intonation are the tones[1] which occur in association with stresses. Two classes of tones may be distinguished:

1. *Static Tones*: The voice remains on one given pitch for a considerable time.
2. *Kinetic Tones* : The pitch of the voice moves upwards or downwards or both during the whole duration of the tone. This change in pitch may take place on a stressed syllable or

1) Tone is defined as 'a stress considered from the point of view of the pitch or pitch-change associated with it.' See Kingdon. R., *The Groundwork of English Intonation*, Op. Cit., p. xxiii.

it may begin on a stressed syllable and end on a following unstressed syllable or syllables.

In English intonation there are two static tones and five kinetic tones. The following is a brief description of each of these tones. Accompanying each description is a diagram in which two horizontal lines represent the upper and lower limits of the normal voice range. Dots and dashes will be used on this scale to indicate weakly stressed and stressed syllables respectively. The position of dots and dashes between the two parallel lines represents the pitch of the relevant syllables (i.e. whether the pitch is high, low or mid), whereas the direction of the dashes shows the direction of the tones associated with the pertinent syllables, as indicated by the following symbols:

ˊ	Rising	ˋ	Falling
∨	Falling-Rising	∧	Rising-Falling
∿	Rising-Falling-Rising	—	Level

The Static Tones :

These are the level tones. When these tones are accompanied by stress, they are used on the words that we want to make prominent in the sentence, but which are not coloured by any feeling. Two types of static tones may be distinguished: the High Level tone, which has the value of a strong stress, and the Low Level tone which has the value of a secondary stress. The two tones have in fact different uses.

The High Level Tone :

When the high level tone is used on the first stressed syllable of an utterance, this syllable is pronounced on a pitch at or just below the top of the normal voice range. It has always the function of a full stress. This tone may be represented graphically as follows :

'Now

In the tonetic stress-mark system we are adopting in the following examples, this tone is represented by a vertical stress-mark placed above the line of print, e.g.

'Now we shall miss the train.

I 'now believe what you have said.

The Low Level Tone :

When we feel that a high level tone would make a word too prominent or that it would interrupt the unity of the tune [1], we use the low level tone. This tone is pronounced on a pitch at or just above the bottom of the normal voice range.

ˌNow

1) A tune means here the complete intonation pattern of an utterance. See Kingdon, R., *English Intonation Practice.* Longmans, London, 1965, p. 3.

In the tonetic stress-mark system this tone is represented by a vertical stress-mark placed below the line of print, e.g.

ˌNow this is the latest fashion.
ˌNow how did he solve the problem ?

The Kinetic Tones :

In English there are five different ways of changing the pitch of a single syllable. During the production of these changes the vocal cords are kept in a continual state of adjustment. The tones produced in this way are called the Kinetic (or the Moving) tones. They give colour and meaning to the utterance with which they are associated. The most important feature of these tones is the direction in which the pitch moves at the end of the tone. Three tones end in a rise, i.e. Tones I, III and V, and two tones end in a fall, i.e. Tones II and IV. Further, these may be :

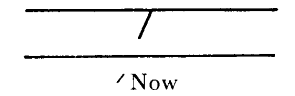
1. either High or Low within the speaker's voice range, and 2. either Normal (using moderate force and moderate range of pitches) or Emphatic (using additional force and extended range of pitches).

The tonetic stress-marks used to indicate the different tones are placed above the line of print to show high tones and below the line to indicate low tones. In either of these positions a normal tone is shown by a single stress-mark and an emphatic tone

by a double one. The nature and significance of these tones can be best understood by studying the effect which each of them has on a monosyllabic word like 'now', as follows :

Tone I (High) or the High Rising Tone :

This begins on a pitch a little below the middle of the normal voice range and then rises to the top.



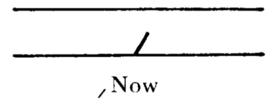
ˊNow

This tone is used on interrogative sentences which seek confirmation or denial. In the tonetic stress-mark system it is represented by a rising stress-mark above the line of print, e.g.

Are you free ˊnow ?
Shall I do it ˊnow ?

Tone I (Low) or the Low Rising Tone :

This begins at or near the bottom, and rises to about the middle of the normal voice range.



ˏNow

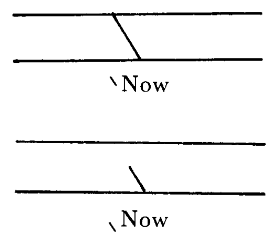
In the tonetic stress-mark system it is represented by a rising stress-mark below the line of print. Syllables bearing this tone must be generally considered

as partially stressed ones. Used at a pause in a long sentence, it may be called the continuing tone, since it indicates that the utterance is not finished. But if it is used by itself it indicates indifference or that something is done mechanically or just as a duty. This may be called the perfunctory tone. For example, in the following sentences the word 'now' is pronounced on a low rising tone if they are said in an indifferent way :

I can't explain it, ˏnow.
It isn't worth it, ˏnow.

Tone II or the Falling Tone :

This begins anywhere from the top to near the bottom of the normal voice range and falls to the bottom.



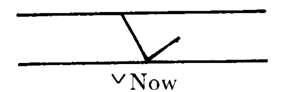
This tone is represented by a falling stress-mark above the line of print to indicate a strong fall and below the line to show a moderate one. This is the decided and final tone, and is used on definite state-

ments and on questions beginning with question words, e.g.

> I'm in need of it ˋnow.
> Where's the list ˎnow ?
> Who's in ˎnow ?

Tone III or the Falling-Rising Tone :

This begins with a fall similar to that of Tone II, and after reaching the bottom of the normal range of voice rises again to about the middle.



This tone is represented by a falling-rising stress-mark above the line of print. Sometimes it may be placed below the line to indicate a low variety of the tone. This is the tone that expresses hesitation, apology or warning. It is not used in association with questions, e.g.

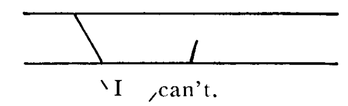
> It's late ˇnow.
> I'm busy ˇnow, but I'll do it some other time.

Tone III has also important variants which involve the separation or division of the two elements of the tone in such a way that one syllable takes the fall and a later one takes the rise. This divides the emphasis between two ideas instead of concentrating it

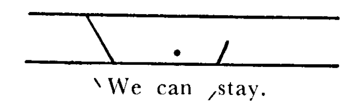
on a single idea as is the case in the undivided tone.

Three variants may be distinguished :

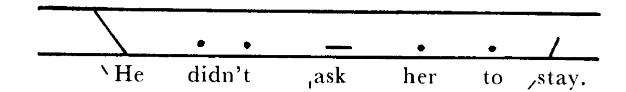
1. The two elements of the tone fall on two adjacent syllables, e.g.



2. The two elements are separated by one or more unstressed syllables, e.g.



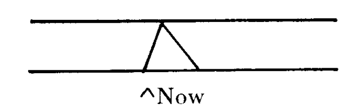
3. The two elements are separated by one or more internal secondary stresses, e.g.



This divided tone is represented by dividing the falling-rising symbol and placing a falling stress-mark on the first element and a low rising one on the second.

Tone IV or the Rising-Falling Tone :

This begins on a pitch somewhere in the lower half of the normal range of voice, rises to the top and then falls immediately to the bottom.



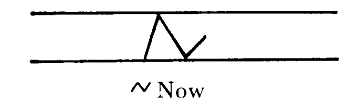
^Now

This tone is represented by a rising-falling stress-mark above the line of print. Sometimes it is placed below the line to show a low variety of the tone. This tone expresses mockery or impatience. It often suggests confidence in the statement correlated with it. In some cases it indicates cordiality or enthusiasm; in others it hints at annoyance. It may be noticed that the two elements of Tone IV cannot be separated, like Tone III, by intervening syllables, e.g.

> You have to start ^now.
> ^Try one.
> ^This won't do.

Tone V or the Rising-Falling-Rising Tone :

This begins with a rise-fall similar to that of Tone IV, and then this is followed immediately by a rise similar to that of the low variant of Tone I.



^v Now

It is represented by a rising-falling-rising stress-mark above the line of print. Sometimes it is placed

below the line to show a low variety of the tone. This tone expresses insinuation, optimism and enthusiasm,[1] e.g.

You're doing your best ~now.
He was ~right.
She'll be in ~time.

1) For a detailed description of the numerous variants and sub-variants of Tone V, see Kingdon, *The Groundwork of English Intonation*, Op. Cit., pp. 141 - 148.

13. THE INTONATION OF UTTERANCES

For the purpose of establishing the intonational patterns associated with the various spoken units in English, we may classify utterances into the following categories :

1. Questions
2. Statements
3. Imperatives
4. Salutations
5. Apologies
6. Exclamations

1. Questions :

a. Questions that begin with a special finite and expect an answer with 'Yes' or 'No' are pronounced on a high rising tone, e.g.

> Has ˊSami gone ?
> Is that the ˊone ?
> Shouldn't we ˊwait for your brother ?

An emphatic nuclear tone may be used to express surprise, e.g.

> Has ˊSami gone ?

b. Questions that begin with a question-word and which are used to seek information are pronounced on a falling tone, e.g.

'What's the \time ?
'How many do you \want ?
'Where have you \put it ?

But if the question is used to ask for repetition, i.e. to indicate that the speaker has not heard or understood what the addressee has said, then Tone I High is used on the question-word, e.g.

/What did you say ?
/When's she leaving ? (i.e. I didn't catch the time of her departure.)

When an emphatic nuclear tone is used, it expresses surprise or shock, e.g.

/What ? (expressing that the speaker is shocked at that.)

/When will he come ? (I'm surprised at the time he chose for his arrival.)

c. The use of question-tags is a common device in English conversation. A question-tag is added to a statement already made. This tag consists of a special finite in the first place followed by a pronoun (or there) :

i. Question-tags may express uncertainty. They seek confirmation, i.e. the speaker is uncertain of the accuracy of a statement and is asking the addressee whether the statement is correct. In this type of tags when the statement is affirmative it is followed by a negative

tag, and vice versa. These tags are pronounced on a high rising tone, e.g.

He'll \wait for her, /won't he?
He 'won't \wait for her, /will he?
She \likes it, /doesn't she?
She 'doesn't like it, /does she?
There's 'no one in the \house, /is there?

ii. Question-tags may also express certainty. The speaker is confident of the correctness of his statement and expects no contradiction. Although the grammatical structure of these tags is similar to that of question-tags under i. above, yet they are pronounced on a falling tone, e.g.

They're 'going to \win, \aren't they?
He 'won't \stay, \will he?
She \ate them, \didn't she?
You're \Osman, \aren't you?

iii. Sometimes, question-tags express disagreement. In this type the speaker repeats a statement that has just been made by the addressee, and adds to it a question-tag pronounced on a rising tone. In this case affirmative statements are followed by affirmative tags, and negative statements are followed by negative tags [1], e.g.

1) For more details on the intonation of tags, see *The Groundwork of English Intonation*, Op. Cit., pp. 246-260.

The 'cup's on the \sideboard, /is it. (i.e. You see that it isn't.)

He 'won't \arrive today, /won't he. (We'll see about that !)

\Oh, you 'aren't \going by yourself, /aren't you. (i.e. You have to go.)

2. Statements:

a. Definite statements that convey a piece of information without any further implication are pronounced on a high falling tone. The nuclear tone falls on the last important word, e.g.

The 'visitors 'haven't \come.
I re'ceived a 'letter from my \sister.
He's 'leaving to\morrow.

b. Mocking or impatient statements are pronounced on a rising falling tone. The use of this tone on statements suggests impatience or intolerance on the part of the speaker. It may have also the implication of a protest, e.g.

They're ^late.
I was ˌchanging my ^clothes.
She'll ^wait for you.

3. Imperatives :

Imperatives may be divided into two main classes : Commands and Requests.

a. Commands are pronounced on a falling tone, e.g.

'Put that on the \desk.
'Leave him a\lone.

Commands may be used as an invitation asking the addressee to accept what is being offered, e.g.

'Have a ciga\rette.
Please \take one.

Impatient command may be conveyed by using the rising-falling tone, e.g.

ˌLeave him a^lone.
ˌTake a^nother one.

b. Requests or polite commands are pronounced on a falling-rising tone, e.g.

'Please explain it to the ˅others.
'Tell him to ˅go with you.
'Let me ˅use it.

If a divided Tone III is used, the falling element is used on the imperative verb in the affirmative or on the special finite 'don't' in the negative, while the rising element is used on a later word, e.g.

\Close the /window.
\Please explain it to the /others.
\Don't use ˌtoo much /paint.

Sometimes, imperatives are used to indicate warning. These are also pronounced on a falling-rising tone,

but the tone does not give the impression of being a request. It often sounds like an exclamation, e.g.

Be ˇcareful.
\Take ˏcare.
\Mind what you're ˏdoing.

Emphatic Tone III gives an impression of urgent warning against some immediate danger, e.g.

Be ˇcareful.
Beˇware.

Tone V may also be used on warnings to make them friendly and sympathetic, e.g.

Be^ware.
'Mind what you're ^doing.

4. Salutations :

Utterances which are used for greeting and farewell are grouped under this heading.

a. Normal greetings are pronounced on a falling tone, e.g.

Good \morning.
Good \evening.
Good 'afterˎnoon.
'How d' you ˎdo ?

b. Casual greetings which are used among friends in a perfunctory manner are pronounced on a low rising tone, e.g.

Good ˏmorning.
Good ˏevening.
How ˏare you?

c. Cordial greetings take the rising-falling tone,e.g.

Good ^morning.
Good ^evening.
ˌHow d'you ^do ?

d. Normal farewells are pronounced on a low rising tone, e.g.

'See you toˏmorrow.
'See you ˏlater.

5. Apologies :

a. Normal apologies are used with the falling-rising tone. Sometimes, the tune is divided, e.g.

Undivided : I'm ˇsorry.
Exˇcuse me.

Divided : I'm ˋso ˏsorry.
Exˋcuse ˏme.
Iˋbeg your ˏpardon.

b. Perfunctory apologies are expressed by using a low rising tone. These are usually used among persons on familiar terms, e.g.

ˏSorry.
I'm ˌvery ˏsorry.

c. Certain apologetic phrases are used to ask for repetition. These are pronounced on a high rising tone. These phrases are :

ˊSorry.
Exˊcuse me.
I ˊbeg your pardon (or ˊPardon).

6. Exclamations :

a. Normal exclamations are usually pronounced on a high falling tone, e.g.

ˋOh, ˋWell, ˋFine, ˋNonsense,
Dear ˋme, How ˋnice, How ˋstrange,
What a ˋnuisance, Exˋactly.

b. Ridiculing, mocking or enthusiastic exclamations are pronounced on a rising-falling tone instead of the falling tone of normal exclamations. The nuclear tone may be either high or low. The use of this tone indicates that the speaker is mocking the addressee or delighted at being proved right over something. It also expresses a greater degree of enthusiasm than exclamations under a. above, e.g.

^Oh, ^Fine, ^Goodness,
How ^awful, What a ^nuisance.

c. Exclamations expressing surprise are pronounced on a normal or emphatic high rising tone. Certain words of one syllable are used in this respect, e.g.

ˊAh, ˊOh, ˊWell, ˊWhat.

d. Another type of exclamation with interrogative force consists of an interrogative sentence (i.e. a sentence beginning with a special finite) pronounced on a low falling or more often on

an emphatic low falling tone, with a high level tone being used on the special finite, e.g.

'Isn't it ‸lovely.

'Aren't they ‸pretty.

'Can you be‸lieve it.

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